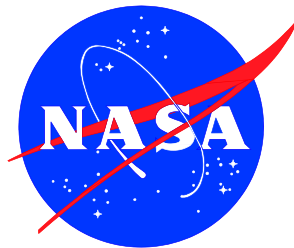


VEHICLE ASSEMBLY BUILDING AREA

Thermal Processing Facility (SWMU 040)
West Crawler Park Site (SWMU 044)
Mobile Launch Platform/Vehicle Assembly Building (SWMU 056)
C-5 Electrical Substation (SWMU 066)
Orbiter Processing Facilities 1 and 2 (SWMU 072)
KSC Press Site (SWMU 074)
Former Development and Testing Laboratory (SWMU 075)
Former Saturn-V Rocket Display (SWMU 080)
Shuttle Flight Operations Contract Generator Maintenance Facility (SWMU 081)
Orbiter Processing Facility 3 (SWMU 083)
Processing Control Center Area (SWMU 101)
Fire Station 6 (SWMU 106)
Mission Support Building Area (SWMU 108)

2016 BIENNIAL GROUNDWATER MONITORING RESULTS KENNEDY SPACE CENTER, FLORIDA

Prepared for:



**National Aeronautics and Space Administration
Kennedy Space Center, Florida**

**November 2016
Revision 0**

Prepared by:

**Geosyntec Consultants
316 South Baylen Street, Suite 201
Pensacola, Florida 32502
(850) 477-6547**

PROFESSIONAL CERTIFICATION AND APPROVAL

Based on the information contained in the attached document titled *Vehicle Assembly Building Area (SWMUs 40, 44, 56, 66, 72, 74, 75, 80, 81, 83, 101, 106 and 108) 2016 Biennial Groundwater Monitoring Results, Kennedy Space Center, Florida* dated September 2016, I hereby certify that the scope of work described in the above-referenced document was performed in accordance with appropriate hydrogeologic standards of practice.

Jill W. Johnson, P.G./Date
Florida Professional Geologist License No. 2376
Geosyntec Consultants, Inc.
Telephone: 850.483.5100
Facsimile: 850.477.6707

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	EXECUTIVE SUMMARY	ES-1
I	INTRODUCTION	1-1
1.1	Background.....	1-1
1.2	Facility Location	1-1
1.3	Purpose.....	1-2
1.4	Report Organization.....	1-2
II	BIENNIAL GROUNDWATER SAMPLING ACTIVITIES	2-1/2-2
III	FIRE STATION AREA 6 (SWMU 106).....	3-1
3.1	Water Levels and Groundwater Flow Direction.....	3-2
3.2	Laboratory Analytical Results	3-2
3.3	Trend Analysis.....	3-2
IV	FORMER DEVELOPMENTAL AND TESTING LABORATORIES (SWMU 75) RESULTS	4-1
4.1	Water Levels and Groundwater Flow Direction.....	4-1
4.2	Laboratory Analytical Results	4-1
4.3	Trend Analysis.....	4-2
V	C-5 ELECTRICAL SUBSTATION AREA (SWMU 66) RESULTS	5-1
5.1	Water Levels and Groundwater Flow Direction.....	5-1
5.2	Laboratory Analytical Results	5-1
5.3	Trend Analysis.....	5-2

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
VI	SHUTTLE FLIGHT OPERATIONS CONTRACT GENERATOR MAINTENANCE FACILITY AREA (SWMU81) RESULTS	6-1
6.1	Water Wells and Groundwater Flow Direction	6-1
6.2	Field Measurement Results	6-1
6.3	Laboratory Analytical Results	6-1
6.4	Trend Analysis	6-2
VII.	VEHICLE ASSEMBLY BUILDING AREA (SWMUS 40, 44, 56, 72, 80, 83, 101 and 108) RESULTS	7-1
7.1	Water Wells and Groundwater Flow Direction	7-1
7.2	Field Measurement Results	7-1
7.3	Laboratory Analytical Results	7-1
7.3.1	VOCs in Shallow Wells	7-2
7.3.2	VOCs in Intermediate Wells	7-2
7.3.3	VOCs in Deep Wells	7-2
7.4	Trend Analysis	7-2
7.5	Former Source Area Interim Groundwater Monitoring	7-3/7-4
VIII	RECOMMENDATIONS AND CONCLUSIONS	
8.1	FS6 Recommendations	8-1
8.2	FDTL Recommendations	8-1
8.3	C5ES Recommendations	8-1
8.4	SFOC Area Recommendations	8-2
8.5	VAB Area Recommendations	8-2
8.6	Summary	8-2
IX	REFERENCES	9-1/9-2

TABLE OF CONTENTS (continued)

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
1-1	Decision Dates for Inclusion of Individual SWMUs into the VAB Area LTM Plan.....	1-3/1-4
2-1	LTM Monitoring Well Network	2-3/2-6
3-1	FS6 Groundwater Elevations	3-3/3-4
3-2	FS6 Summary of Historical Groundwater Data.....	3-5/3-6
4-1	FDTL Groundwater Elevations	4-3/4-4
4-2	FDTL Summary of Historical Groundwater Data	4-5/4-8
5-1	C5ES Groundwater Elevations	5-3/5-4
5-2	C5ES Summary of Historical Groundwater Data.....	5-5/5-8
6-1	SFOC Groundwater Elevations	6-3/6-4
6-2	SFOC Groundwater Quality Parameters.....	6-5
6-3	SFOC Summary of Historical Groundwater Data	6-6
7-1	VAB Area Groundwater Elevations	7-5/7-8
7-2	VAB Area Groundwater Parameters	7-9/7-10
7-3	VAB Area Summary of Historical Groundwater Data	7-11/7-18
8-1	Table Monitoring Wells to be Sampled for VAB Area LTM in 2018.....	8-3/8-6

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1-1	Solid Waste Management Units Included in Western VAB Area LTM	1-5/1-6
1-2	Solid Waste Management Units Included in Eastern VAB Area LTM.....	1-7/1-8
1-3	Solid Waste Management Units off Schwartz Road Included in VAB Area LTM	1-9/1-10
2-1	FS6 Area Site Layout.....	2-7/2-8
2-2	FDTL Area Site Layout	2-9/2-10
2-3	C5ES Site Layout.....	2-11/2-12
2-4	SFOC Site Layout	2-13/2-14
2-5	VAB Area Site Layout.....	2-15/2-16
3-1	FS6 Shallow Zone Potentiometric Surface Map – May 2016	3-7/3-8

TABLE OF CONTENTS (continued)

LIST OF FIGURES (continued)

<u>Figure</u>	<u>Title</u>	<u>Page</u>
3-2	FS6 Hydrographs and Trend Plots of Vinyl Chloride	3-9/3-10
3-3	FS6 Summary of Vinyl Chloride Results	3-11/3-12
4-1	FDTL Shallow Zone Potentiometric Surface Map – May 2016.....	4-9/4-10
4-2	FDTL Intermediate Zone Potentiometric Surface Map – May 2016.....	4-11/4-12
4-3	FDTL Shallow Hydrograph and Trend Plot of Trichloroethene and Vinyl Chloride	4-13/4-14
4-4	FDTL Intermediate Hydrographs and Trend Plots of Trichloroethene and Vinyl Chloride	4-15/4-16
4-5	FDTL Area Summary of Trichloroethene and Vinyl Chloride Results in Groundwater	4-17/4-18
5-1	C5ES Shallow Zone Potentiometric Surface Map – May 2016	5-9/5-10
5-2	C5ES Intermediate Zone Potentiometric Surface Map – May 2016	5-11/5-12
5-3	C5ES Hydrographs and Trend Plots of Vinyl Chloride in Shallow Wells..	5-13/5-14
5-4	C5ES Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells	5-15/5-16
5-5	C5ES Summary of Vinyl Chloride Results	5-17/5-18
6-1	SFOC Shallow Zone Potentiometric Surface Map – May 2016.....	6-7/6-8
6-2	SFOC Hydrograph and Trend Plot of Antimony	6-9/6-10
6-3	SFOC Summary of Antimony Results.....	6-11/6-12
7-1	VAB Area Shallow Zone Potentiometric Surface Map – May 2016	7-19/7-20
7-2	VAB Area Intermediate Zone Potentiometric Surface Map – May 2016 ...	7-21/7-22
7-3	VAB Area Deep Zone Potentiometric Surface Map – May 2016	7-23/7-24
7-4	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Shallow Wells	7-25/7-26
7-5	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells Upgradient of the Biosparge Wall.....	7-27/7-28
7-6	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells Downgradient of the Biosparge Wall.....	7-29/7-30
7-7	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells in the PCCA and SATV Areas	7-31/7-32

TABLE OF CONTENTS (continued)

LIST OF FIGURES (continued)

7-8	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells in the PRES Area.....	7-33/7-34
<u>Figure</u>	<u>Title</u>	<u>Page</u>
7-9	VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Deep Wells.....	7-35/7-38
7-10	VAB Area Summary of Vinyl Chloride Results in Shallow Groundwater	7-39/7-40
7-11	VAB Area Summary of Vinyl Chloride Results in Intermediate Groundwater	7-41/7-42
7-12	VAB Area Summary of Vinyl Chloride Results in Deep Groundwater	7-43/7-44

APPENDICES

APPENDIX A	APPLICABLE REMEDIATION TEAM MEETING MINUTES
APPENDIX B	GROUNDWATER SAMPLING FORMS (IN E-COPY ONLY)
APPENDIX C	LABORATORY ANALYTICAL REPORTS (IN E-COPY ONLY)
APPENDIX D	MAROS OUTPUT

TABLE OF CONTENTS (continued)

ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
C5ES	C-5 Electrical Substation
cDCE	cis-1,2-Dichloroethene
DO	Dissolved Oxygen
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
GCTL	Groundwater Cleanup Target Level
Geosyntec	Consultants
IGM	Interim Groundwater Monitoring
KSC	Kennedy Space Center
LTM	Long-Term Monitoring
MAROS	Monitoring and Remediation Optimization System
MLPV	Mobile Launch Platform/Vehicle Assembly Building
MSBA	Mission Support Building Area
NADC	Natural Attenuation Default Concentration
NASA	National Aeronautics and Space Administration
OP12	Orbiter Processing Facilities 1 and 2
OPF3	Orbiter Processing Facility 3
ORP	Oxidation-Reduction Potential
PCCA	Processing Control Center Area
PDB	Passive Diffusion Bag
PRES	KSC Press Site
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SATV	Former Saturn-V Rocket display
SFOC	Shuttle Flight Operations Contract Generator Maintenance Facility Area
SOP	Standard Operating Procedure
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
tDCE	trans-1,2-Dichloroethene
TDS	Total Dissolved Solids
TPF	Thermal Processing Facility
VAB	Vehicle Assembly Building
VC	Vinyl Chloride
VOC	Volatile Organic Compound
WCPS	West Crawler Park Site

EXECUTIVE SUMMARY

This document presents the findings of the 2016 Long-Term Monitoring (LTM) activities that were completed at the Vehicle Assembly Building (VAB) Area, located at the John F. Kennedy Space Center (KSC), Florida. This area includes Solid Waste Management Unit (SWMU) Numbers 40, 44, 56, 66, 72, 74, 75, 80, 81, 83, 101, 106 and 108 under KSC's Resource Conservation and Recovery Act (RCRA) Corrective Action program.

In 2016, two existing MLPV monitoring wells and eight existing FDTL monitoring wells were added to the LTM activities at the VAB Area.

During the May 2016 LTM event, groundwater samples were collected from 44 monitoring wells for analysis of volatile organic compounds (VOCs) using passive diffusion bags (PDB), two monitoring wells for analysis of VOCs using traditional low flow purging techniques, and two monitoring wells for total antimony, using traditional low flow purging techniques. Below is a summary of the area-specific recommendations that are made based on the 2016 results.

The following recommendations are made in the FS6 Area based on the May 2016 sampling event:

- Conduct sampling in November 2016 (end of wet season) in two wells for VOCs using low-flow sampling techniques.
- If VC results from the November sampling event are less than Groundwater Cleanup Target Levels (GCTL), propose No Further Action (NFA) for FS6 groundwater.
- If VC results from the November sampling event are greater than GCTL, resume biennial sampling with alternating seasons.

The following recommendations are made in the FDTL Area based on the May 2016 sampling event:

- Discontinue sampling at FDTL-IW13I because concentrations of TCE and VC have been below detection limits for three or more consecutive sampling events.
- Continue sampling seven wells for VOCs using PDBs on a biennial basis with alternating seasons (next event in Fall 2018).

The following recommendations are made in the C5ES Area based on the May 2016 sampling event:

- Discontinue sampling C5ES-MW10I, C5ES-MW12S, and C5ES-MW12I because concentrations of VC have been below GCTL for at least two consecutive sampling events.
- Continue sampling three wells for VOCs using PDBs on a biennial basis with alternating seasons (next event in Fall 2018).

The following recommendations are made in the Shuttle Flight Operations Contract Generator Maintenance Facility (SFOC) Area based on the May 2016 sampling event:

- Continue sampling SFOC-IW1S and SFOC-IW4S for antimony on a biennial basis with alternating seasons (next event in Fall 2018).
- Prior to next sampling event, install a new monitoring well located adjacent to SFOC-IW1S (screened from 6 to 16 feet below land surface with 0.006-inch slot screen and fine sand filter pack) and sample on a biennial basis to evaluate if the results are more representative of the surficial aquifer conditions.

The following recommendations are made in the VAB Area based on the May 2016 sampling event.

- Discontinue sampling at one shallow well (PCCA-MW004), seven intermediate wells (MLPV-IW0006IR, MLPV-IW0012I, MLPV-IW0056, SATV-IW0009I, SATV-IW0010, PCCA-MW0017 and PRES-IW0007I), and seven deep wells (MLPV-IW0048, MLPV-IW0049, MLPV-IW0050, MLPV-IW0051, MLPV-IW0054, MLPV-IW0055, and PRES-IW0010) because concentrations of VC have been below GCTL for at least two consecutive sampling events.
- Continue sampling at 13 wells for VOCs using PDBs and two wells for VOCs using low flow purging techniques on a biennial basis with alternating seasons (next event in Fall 2018).
- Add two intermediate wells (SATV-IW0004I and VABU-IW0001I) and two deep wells (MLPV-IW0020D and VAB-IW0005D) to the VAB LTM sampling plan (next event in Fall 2018).

SECTION I

INTRODUCTION

1.1 BACKGROUND

This document presents the findings of the 2016 Long Term Monitoring (LTM) activities that were completed at the Vehicle Assembly Building (VAB) Area, located at the John F. Kennedy Space Center (KSC), Florida. The five areas that are monitored under this LTM program include Solid Waste Management Unit (SWMU) Numbers 40, 44, 56, 66, 72, 74, 75, 80, 81, 83, 101, 106, and 108 under KSC's Resource Conservation and Recovery Act (RCA) Corrective Action program. The SWMU locations and boundaries in each of the five areas described in Section 1.2 are presented on Figure 1-1, 1-2, and 1-3. Decision dates when each SWMU was included in the overall LTM for the VAB Area are presented in Table 1-1. Applicable Remediation Team Meeting minutes are included in Appendix A. LTM activities were performed in accordance with the recommendations presented in the *Vehicle Assembly Building Area 2014 Annual Long Term Monitoring Report* dated April 2015 and approved by the National Aeronautics and Space Administration (NASA) Remediation Team during the February 2013 Remediation Team meeting. This Annual LTM Report was prepared by Geosyntec Consultants (Geosyntec) for NASA under contract number NNK12CA13B, Delivery Order NNK13CA20T project number PCN ENV2188.

1.2 FACILITY LOCATION

The VAB Area is located within KSC on the east coast of Florida in Brevard County. Results for this sampling event are presented for five separate areas as shown on Figures 1-1 through 1-3. These are: Fire Station 6 (FS6) Area (SWMU No. 106), Former Development and Testing Laboratory (FDTL) Area (SWMU No. 75), C-5 Electrical Substation (C5ES) Area (SWMU No. 66), Shuttle Flight Operations Contract Generator Maintenance Facility (SFOC) Area (SWMU No. 81), and the VAB Area. The VAB Area includes the following sites: Thermal Processing Facility (TPF) (SWMU No. 40), the Mobile Launch Platform/Vehicle Assembly Building (MLPV) Area (SWMU No. 56), KSC Press Site (PRES) (SWMU No. 74), Former Saturn-V Rocket Display (SATV) (SWMU No. 80), West Crawler Park Site (WCPS) (SWMU No. 44), Orbiter Processing Facilities 1 and 2 (OP12) (SWMU No. 72), Orbiter Processing Facility 3 (OPF3) (SWMU No. 83), Processing Control Center Area (PCCA) (SWMU No. 101), and Mission Support Building Area (MSBA) (SWMU No. 108).

1.3 PURPOSE

The purpose of this report is to present the results of the biennial LTM activities that were conducted at each of the five areas in May 2016. Additionally, this report provides recommendations for future monitoring in each area.

1.4 REPORT ORGANIZATION

The remainder of this report is organized as follows:

Section II: *Biennial Groundwater Sampling Activities*. This section describes the methodology used for the May 2016 biennial LTM event.

Section III: *Fire Station 6 Area (SWMU 106) Results*. This section provides a summary of the groundwater levels, laboratory analytical data collected and trend analysis for the FS6 Area.

Section IV: *Former Development and Testing Laboratory Area (SWMU 75) Results*. This section provides a summary of groundwater levels, laboratory analytical data collected, and trend analysis for the FDTL Area.

Section V: *C-5 Electrical Substation (SWMU 66) Area Results*. This section provides a summary of groundwater levels, laboratory analytical data collected, and trends analysis for the C5ES Area.

Section VI: *Shuttle Flight Operations Contract Generator Maintenance Facility Area (SWMU 81) Results*. This section provides a summary of groundwater levels, field measurements, laboratory analytical data collected, and trend analysis for the SFOC Area.

Section VII: *Vehicle Assembly Building Area (SWMUs 40, 44, 56, 72, 74, 80, 83, 101, and 108) Results*. This section provides a summary of the groundwater levels, field measurements, laboratory analytical data collected, trend analysis, and remediation and additional assessment activities for the VAB Area.

Section VIII: *Recommendations*. This section presents recommendations for future activities in each of the five areas.

Section IX: *References*. This section provides a listing of the documents used in developing this report.

Table 1-1. Decision Dates for Inclusion of Individual SWMUs into the VAB Area LTM Plan

SWMU/PRL Number	SWMU Name	Area	Decision Date
66	C-5 Electrical Substation	C5ES	16-17 December 2004 Meeting (to conduct LTM sampling and reporting as part of the VAB LTM program).
81	Shuttle Flight Operations Contract Generator Maintenance Facility	SFOC	
40	Thermal Processing Facility	VAB	27-28 June 2006 Meeting (to enter the well into the LTM program for the VAB area) [Decision 0606-D29]
44	West Crawler Park Site		16-17 December 2004 Meeting (to conduct LTM sampling and reporting as part of the VAB LTM program).
56	Mobile Launch Platform/Vehicle Assembly Building Area		22 October 2015 Meeting (to sample SAMW0001 and SAMW0002) [Decision 1510-D03]
72	Orbiter Processing Facilities 1 and 2		9-10 November 2004 Meeting (to sample with VAB) [Decision 0411-D03]
74	KSC Press Site		19-20 November 2002 Meeting (to group with VAB monitoring program) [Decision 0211-D05]
80	Former Saturn-V Rocket Display		28 August 2002 Meeting (to group with VAB monitoring program) [Decision 0208-D01]
83	Orbiter Processing Facility 3		16-17 December 2004 Meeting (to group with VAB monitoring program) [Decision 0412-D06]
101	Processing Control Center Area		7 March 2008 Meeting (to conduct LTM sampling with the addition of ORP to field parameters) [Decision 0803-D06]
108	Mission Support Building Area		7-8 December 2011 (to incorporate into the VAB monitoring program) [Decision 1112-D12]
106	Fire Station 6 Area	FS6	31 January 2013 Meeting (to incorporate into the VAB monitoring program) [Decision 1321-D28]
75	Former Development Testing Lab Area	FDTL	18-19 November 2014 Meeting (to continue long-term groundwater monitoring on a biennial frequency) [Decision 1411-D35]

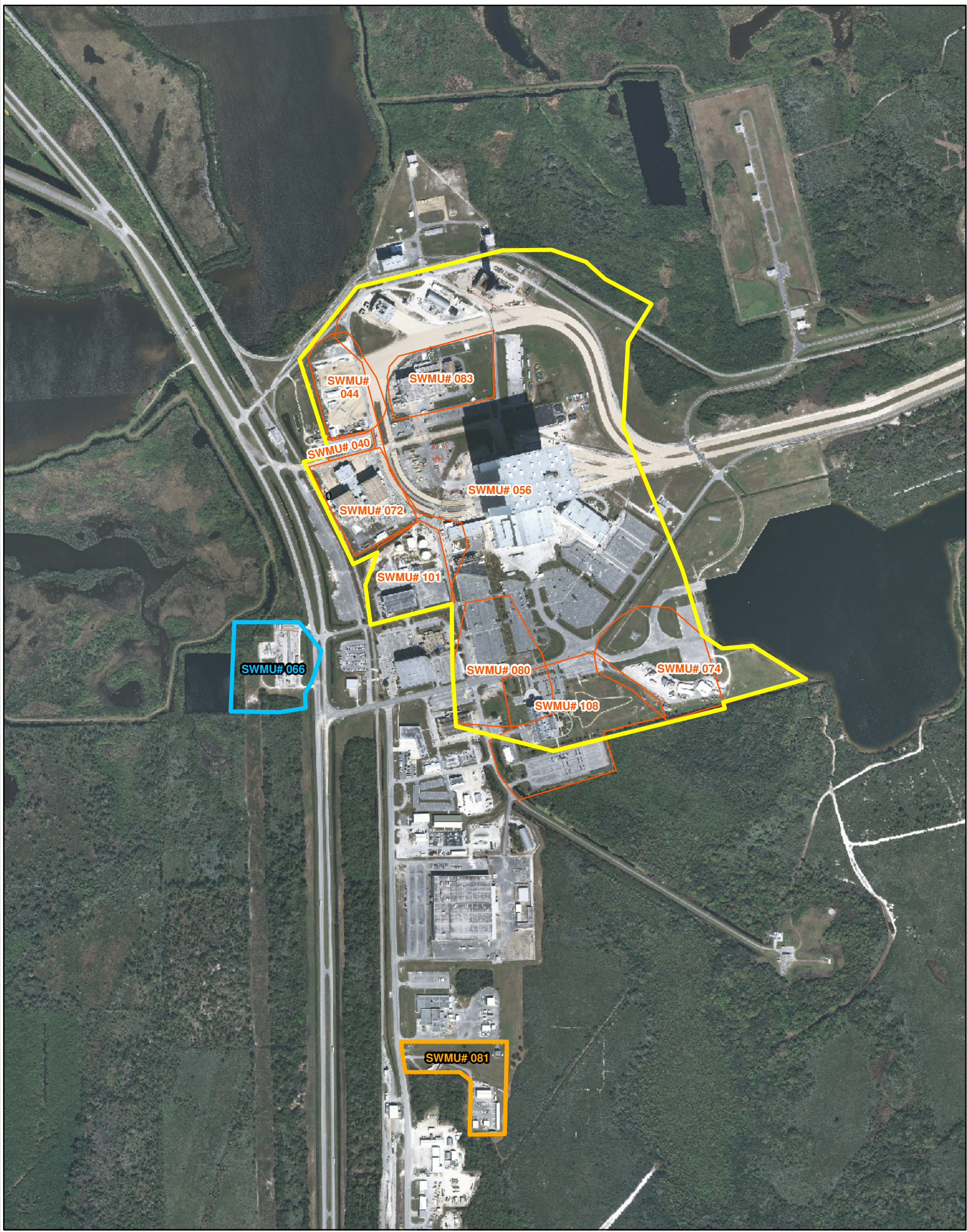




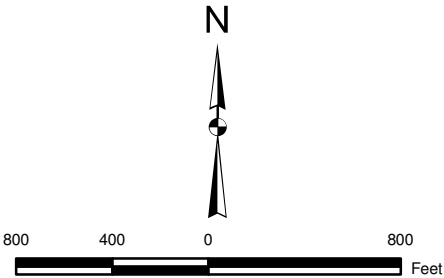


Figure 1-1
Solid Waste Management Units included in
Western VAB Area LTM

Legend

-  C-5 Electrical Substation (C5ES) Facility - SWMU# 066
-  Shuttle Flight Operations Contract (SFOC) Area - SWMU# 081
-  VAB LTM Area
-  Solid Waste Management Unit Boundary



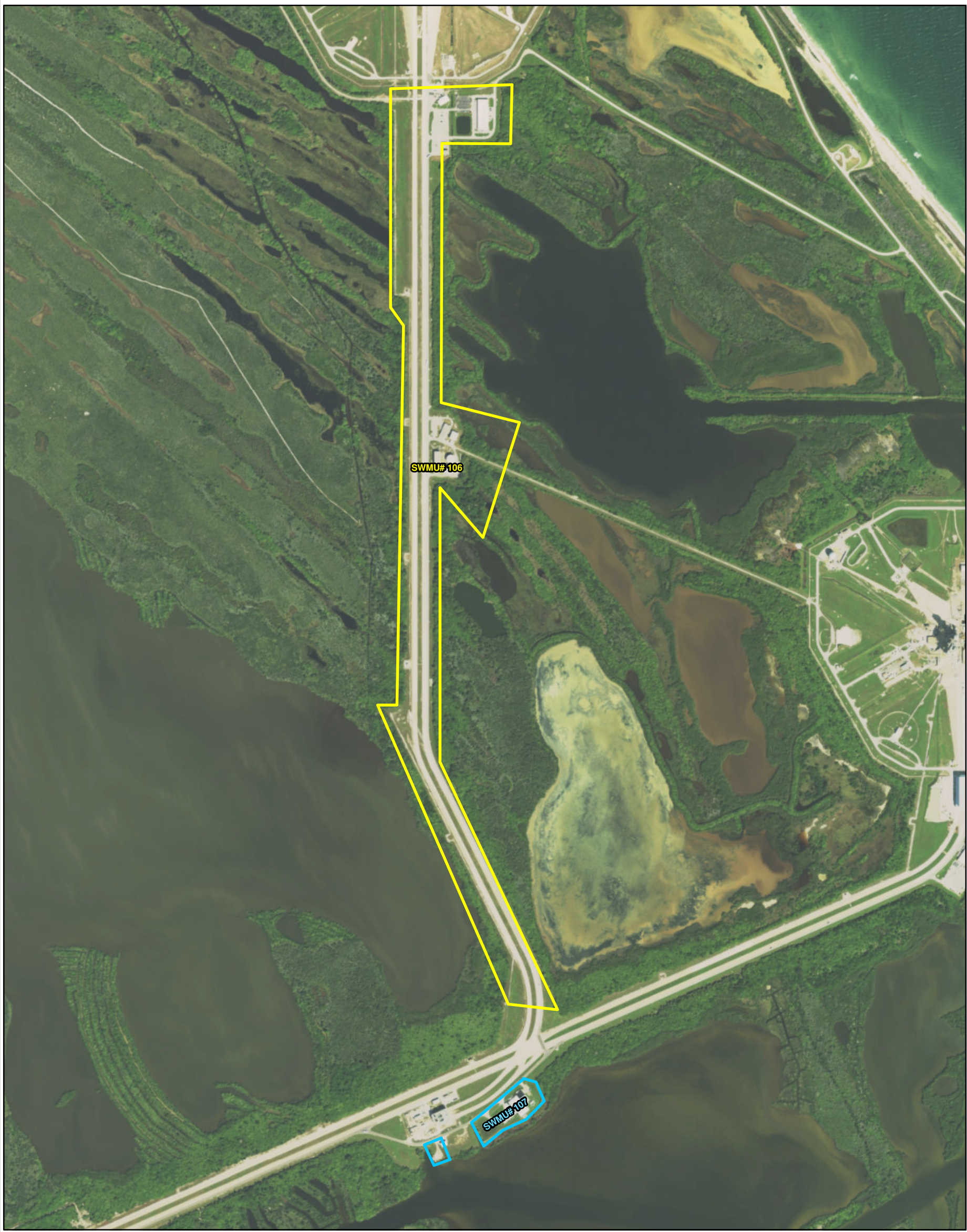


Figure 1-2
Solid Waste Management Units included in
Eastern VAB Area LTM

Legend

- Fire Station #6 (FS6) - SWMU #106
- LC-39 Observation Gantry Area (LC39OGA) - SWMU #107

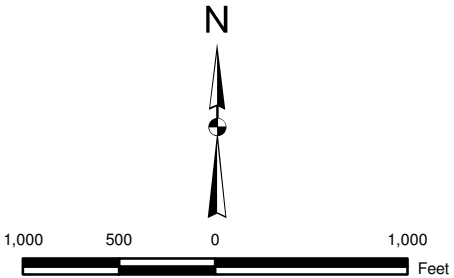
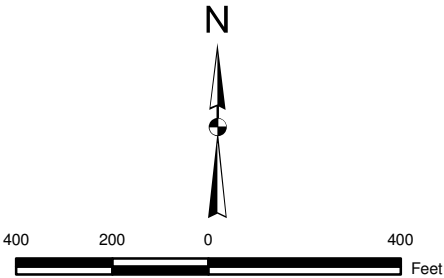




Figure 1-3
Solid Waste Management Units off Schwartz Road
included in VAB Area LTM

Legend

 Former Development Testing Laboratory (FDTL) Area - SWMU# 075



SECTION II

BIENNIAL GROUNDWATER SAMPLING ACTIVITIES

The biennial LTM monitoring well network is presented in Table 2-1. Geosyntec personnel deployed passive diffusion bags (PDBs) C5ES Area, FS6 Area, FDTL Area, and VAB Area monitoring wells on 3, 4, and 6 May 2016. PDBs were suspended across the midsection of the screen and allowed to equilibrate prior to sample retrieval. The LTM event activities were performed on 23 through 27 May 2016. Water levels were recorded from a total of 113 monitoring wells. Groundwater samples were collected from 48 monitoring wells. Water levels were not recorded in 26 monitoring wells, because they were inaccessible, could not be located or were abandoned. Groundwater quality parameters were not collected in monitoring wells sampled using PDBs. Site layouts and monitoring well locations for the FS6 Area, FDTL Area, C5ES Area, SFOC Area, VAB Area, and are presented on Figures 2-1 through 2-5, respectively.

Monitoring well purging (for the locations sampled using traditional purging techniques) and sampling activities were conducted in accordance with the most recent version of the Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs) [FDEP 2014] and the KSC Sampling and Analysis Plan (SAP) [NASA 2011]. Groundwater samples collected for chemical analysis were submitted to Test America in Pensacola, Florida for analysis under chain-of-custody protocols. The groundwater samples were analyzed for volatile organic compounds (VOCs) by Environmental Protection Agency (EPA) Method 8260B or total antimony by EPA Method 200.8 (Table 2-1). Groundwater sampling forms from the spring 2016 sampling event are presented in Appendix B.

Table 2-1. LTM Monitoring Well Network

Well ID	Area	Screened Interval (ft BLS)	Water Levels	Parameters Analyzed in Spring 2016
FS6-MW0001	FS6	25 to 35	✓	VOCs
FS6-MW0002		20 to 30	✓	--
FS6-MW0003		20 to 30	✓	VOCs
FDTL-IW0006S	FDTL	5 to 15	✓	--
FDTL-IW0015S		5 to 15	✓	VOCs
FDTL-IW0018I		5 to 15	✓	--
FDTL-IW0003I		15 to 25	✓	--
FDTL-IW0004I		15 to 25	✓	--
FDTL-IW0005I		25 to 35	✓	--
FDTL-IW0007I		10 to 20	✓	VOCs
FDTL-IW0008I		10 to 20	✓	VOCs
FDTL-IW0009I		10 to 20	✓	VOCs
FDTL-IW0010I		10 to 20	✓	--
FDTL-IW0011I		10 to 20	✓	--
FDTL-IW0012I		10 to 20	✓	--
FDTL-IW0013I		10 to 20	✓	VOCs
FDTL-IW0014I		10 to 20	✓	VOCs
FDTL-IW0016I		10 to 20	✓	--
FDTL-IW0017I		10 to 20	✓	VOCs
FDTL-IW0019I		10 to 20	✓	VOCs
FDTL-IW0020I		10 to 20	✓	--
C5ES-MW0001S	C5ES	5 to 15	✓	--
C5ES-MW0001I		28 to 33	✓	--
C5ES-MW0002S		5 to 15	✓	--
C5ES-MW0003S		5 to 15	✓	--
C5ES-MW0003I		28 to 33	✓	--
C5ES-MW0004S		5 to 15	✓	--
C5ES-MW0004I		28 to 33	✓	--
C5ES-MW0005S		5 to 15	✓	--
C5ES-MW0007S		5 to 15	--	--
C5ES-MW0008S		3 to 13	--	--
C5ES-MW0009S		5 to 15	--	--
C5ES-MW0010S		10 to 15	✓	--
C5ES-MW0010I		20 to 25	✓	VOCs
C5ES-MW0011S		10 to 15	✓	--
C5ES-MW0012S		10 to 15	✓	VOCs
C5ES-MW0012I		20 to 25	✓	VOCs
C5ES-MW0013S		9.5 to 14.5	✓	--
C5ES-MW0013I		33 to 38	✓	--
C5ES-MW0014I		33 to 38	✓	--
C5ES-MW0015I		33 to 38	--	--
C5ES-MW0016S		7 to 12	✓	--
C5ES-MW0017S		7 to 12	✓	VOCs
C5ES-MW0018S		7 to 12	✓	VOCs
C5ES-MW0019I		13 to 23	✓	VOCs
C5ES-PZ0001		5 to 15	✓	--
SFOC-IW0001S	SFOC	2 to 12	✓	Total Antimony
SFOC-IW0002S		2 to 12	✓	--
SFOC-IW0003S		2 to 12	✓	--
SFOC-IW0004S		2 to 12	✓	Total Antimony
SFOC-IW0005S		2 to 12	✓	--
SFOC-IW0006S		5 to 15	✓	--
MLPV-IW0001S	VAB	2 to 12	✓	--
MLPV-IW0001D		50 to 55	✓	--

VAB 2016 Bien LTM Rpt - Section II

Revision: 0

November 2016

Table 2-1. LTM Monitoring Well Network

Well ID	Area	Screened Interval (ft BLS)	Water Levels	Parameters Analyzed in Spring 2016
MLPV-IW0002I	VAB	28 to 33	--	--
MLPV-IW0006IR		28 to 33	✓	VOCs
MLPV-IW0009D		45 to 50	✓	VOCs
MLPV-IW0009I		28 to 33	✓	VOCs
MLPV-IW0011I		35 to 40	✓	--
MLPV-IW0012D		45 to 50	✓	VOCs
MLPV-IW0012I		35 to 40	✓	VOCs
MLPV-IW0014I		35 to 40	✓	--
MLPV-IW0017I		35 to 40	✓	--
MLPV-IW0018D		50 to 55	✓	VOCs
MLPV-IW0022D		48 to 53	✓	--
MLPV-IW0027D		45 to 50	✓	--
MLPV-IW0027I		28 to 33	✓	--
MLPV-IW0028D		45 to 50	✓	--
MLPV-IW0028I		28 to 33	✓	VOCs
MLPV-IW0029D		42 to 47	✓	VOCs
MLPV-IW0046		35 to 45	✓	VOCs
MLPV-IW0047		35 to 45	✓	VOCs
MLPV-IW0048		40 to 50	✓	VOCs
MLPV-IW0049		38 to 48	✓	VOCs
MLPV-IW0050		40 to 50	✓	VOCs
MLPV-IW0051		45 to 55	✓	VOCs
MLPV-IW0052		40 to 50	✓	VOCs
MLPV-IW0053		35 to 45	✓	VOCs
MLPV-IW0054		40 to 50	✓	VOCs
MLPV-IW0055		40 to 50	✓	VOCs
MLPV-IW0056		30 to 40	✓	VOCs
MLPV-SAMW0001		43 to 48	✓	VOCs
MLPV-SAMW0003		43 to 48	✓	VOCs
OP12-IW0001S		2 to 12	Abandoned	
OP12-IW0001I		20 to 30	Abandoned	
OP12-IW0002S		2 to 12	Abandoned	
OP12-IW0002I		20 to 30	Abandoned	
OP12-IW0003S		2 to 12	Abandoned	
OP12-IW0003I		20 to 30	Abandoned	
OP12-IW0004S		2 to 12	Abandoned	
OP12-IW0004I		20 to 30	Abandoned	
OP12-IW0005S		2 to 12	Abandoned	
OP12-IW0005I		20 to 30	Abandoned	
OP12-IW0006S		2 to 12	Abandoned	
OP12-IW0007S		2 to 12	Abandoned	
OP12-IW0007I		20 to 30	Abandoned	
OPF3-IW0001D		42 to 47	Abandoned	
OPF3-IW0006S		10 to 20	✓	--
PCCA-MW0004		5 to 15	✓	VOCs
PCCA-MW0007		5 to 15	✓	--
PCCA-MW0008		5 to 15	✓	--
PCCA-MW0009		5 to 15	✓	--
PCCA-MW0010		5 to 15	✓	--
PCCA-MW0011		5 to 15	✓	--
PCCA-MW0012		5 to 15	✓	--
PCCA-MW0013		5 to 15	✓	--
PCCA-MW0014		5 to 15	✓	--
PCCA-MW0015		15 to 25	✓	--
PCCA-MW0016		15 to 25	✓	--
PCCA-MW0017		15 to 25	✓	VOCs
PCCA-MW0018		15 to 25	✓	--

Table 2-1. LTM Monitoring Well Network

Well ID	Area	Screened Interval (ft BLS)	Water Levels	Parameters Analyzed in Spring 2016
PCCA-MW0019	VAB	15 to 25	✓	--
PCCA-MW0020		25 to 35	✓	--
PRES-IW0001SR		6 to 16	✓	--
PRES-IW0002D		42 to 47	--	--
PRES-IW0006S		3 to 13	--	--
PRES-IW0007S		1 to 11	--	--
PRES-IW0007I		32 to 37	✓	VOCs
PRES-IW0007D		42 to 47	✓	--
PRES-IW0008I		38 to 42	--	--
PRES-IW0009		40 to 50	✓	VOCs
PRES-IW0010		40 to 50	✓	VOCs
SATV-IW0003D		40 to 45	✓	--
SATV-IW0009I		22 to 27	✓	VOCs
SATV-IW0010		35 to 45	✓	VOCs
TPF-MW0001		23 to 28	✓	--
VABU-IW0004S		3 to 13	✓	--
VABU-IW0006D		42 to 47	✓	--
WCPS-IW0001SR		2.5 to 12.5	✓	VOCs
WCPS-IW0002SR		2.5 to 12.5	--	--
WCPS-IW0005S		2 to 12	✓	--
WCPS-IW0006S		3 to 13	✓	--
WCPS-IW0009S		2.5 to 12.5	✓	--
WCPS-IW0010S		2.5 to 12.5	--	--
WCPS-IW0012S		2 to 12	--	--
WCPS-IW0013S		2.5 to 12.5	✓	--
WCPS-IW0014S		4 to 14	✓	--
WCPS-IW0015S		3 to 13	✓	--
WCPS-IW0016		15 to 25	✓	VOCs

Notes:

1. BLS = Below Land Surface.
2. ft = feet.
3. "--" indicates that data was not collected. The water levels not collected were due to limited accessibility or because the wells could not be located or were abandoned.
4. VOCs indicates volatile organic compounds collected using passive diffusion bags (PDBs).
5. Grey shading indicates groundwater sample collected using low flow purging methods.
6. Abandoned indicates the associated wells were abandoned on November 10, 2015 by Jacobs-CORE under Contract No. NNK12CA14B, Task Order No. 06.

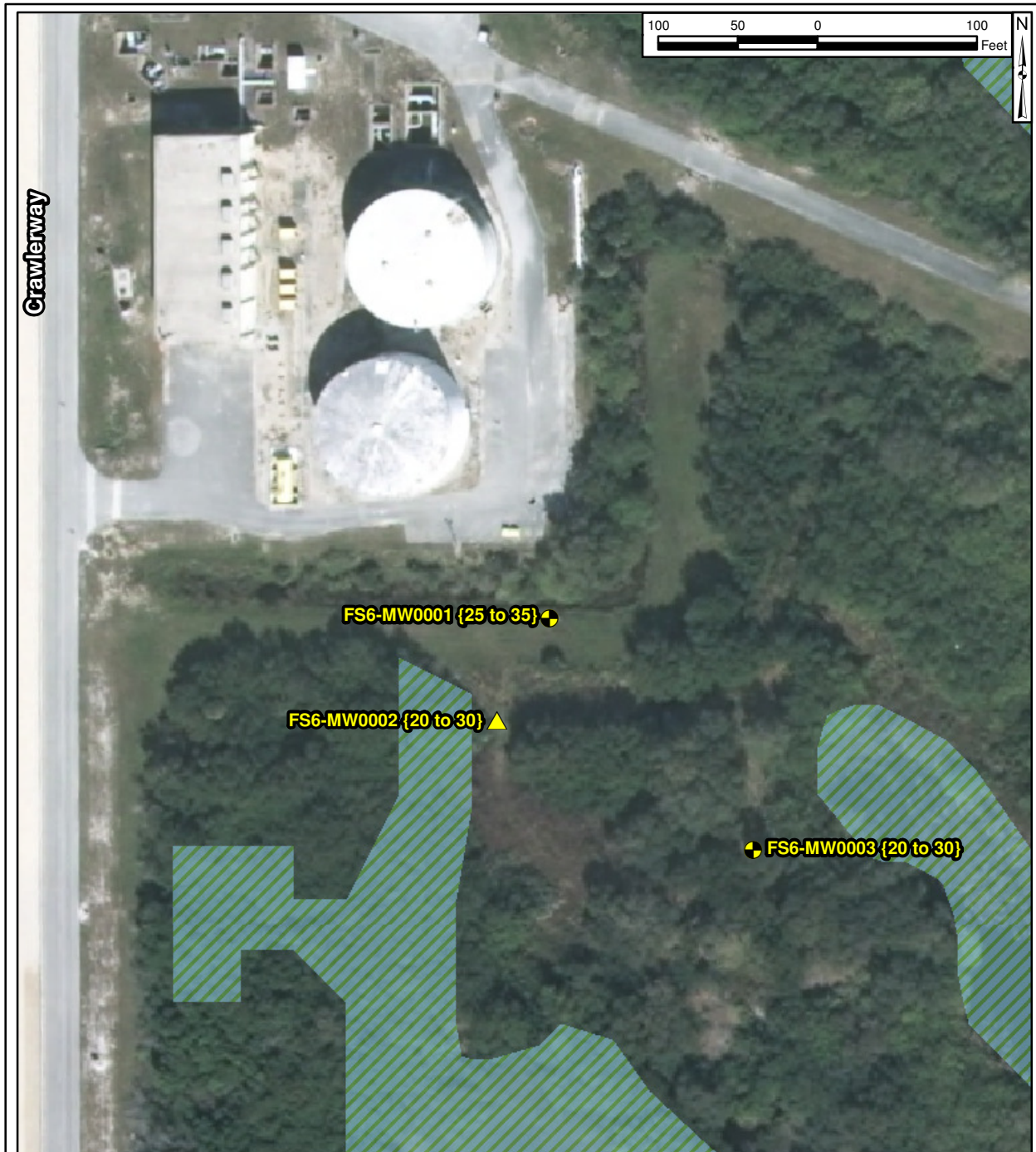





Figure 2-1
FS6 Area Site Layout

Legend

-  Shallow Monitoring Well Location {screen interval}
-  Shallow Monitoring Well Location {screen interval} (Water Level Only Collected)
-  Wetlands

Notes:

1. Screen intervals are presented in feet below land surface.

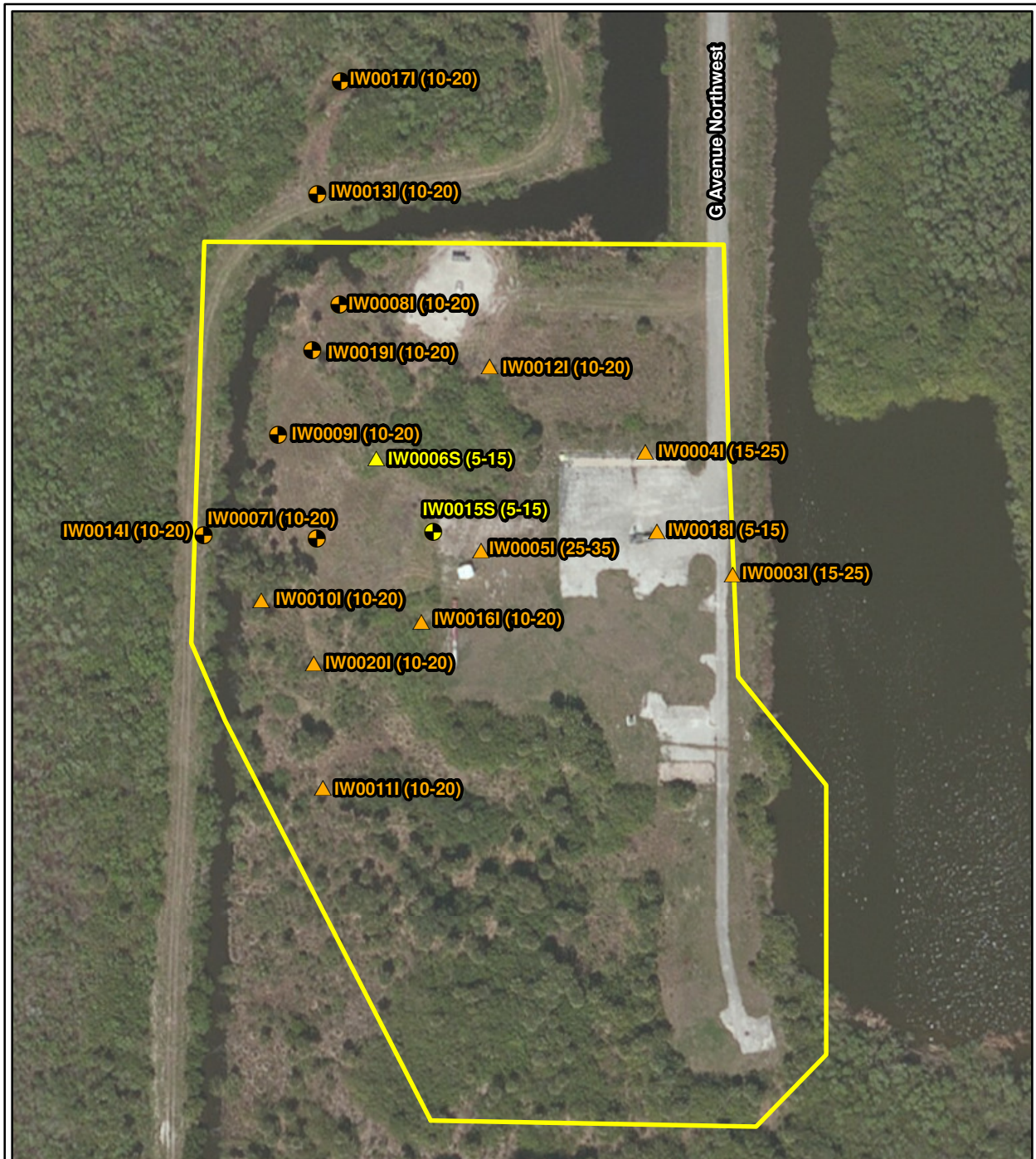






Figure 2-2
FDTL Area Site Layout

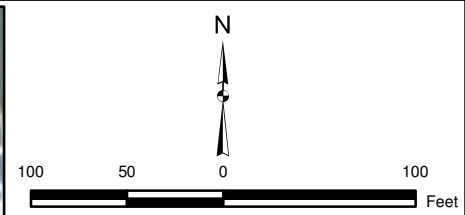
Legend

-  Shallow Monitoring Well Location {screen interval}
-  Shallow Monitoring Well Location {screen interval} (Water Level Only Collected)
-  Intermediate Monitoring Well Location {screen interval}
-  Intermediate Monitoring Well Location {screen interval} (Water Level Only Collected)

 Former Development Testing Lab (FDTL)

140 70 0 140
Feet





Legend

- Shallow Monitoring Well Location {screen interval}
- ▲ Shallow Monitoring Well Location {screen interval} (Water Level Only Collected)
- Intermediate Monitoring Well Location {screen interval}
- ▲ Intermediate Monitoring Well Location {screen interval} (Water Level Only Collected)

Note:
1. Screen interval is presented in feet, below land surface (ft, BLS).

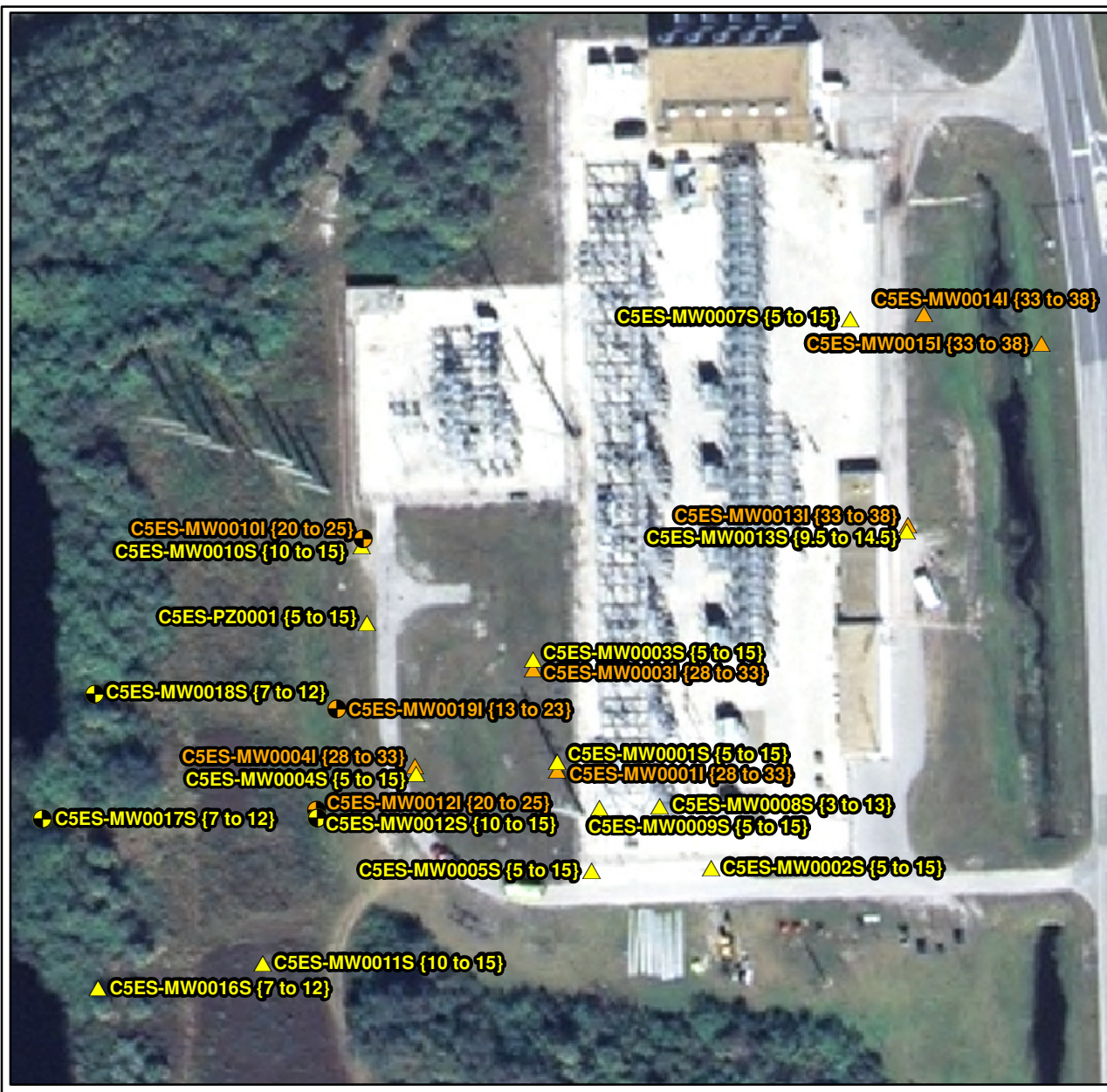
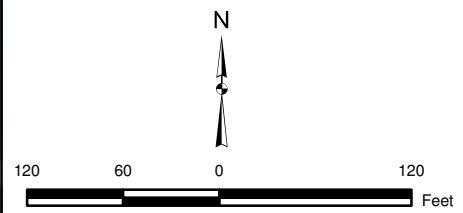


Figure 2-3




C5ES Site Layout

2-11/2-12

Path: (T:\usw\01 Data)\T03\GIS\F07\46\W02\01606C5_sitelayout.mxd 14 September 2016 JPB



Legend

-  Shallow Monitoring Well Location {screen interval}
-  Shallow Monitoring Well Location {screen interval} (Water Level Only Collected)
-  Fence

Note:

1. Screen interval is presented in feet, below land surface (ft, BLS).



Path: (T:\usmile-01\00a\17-003\ISFH0746\WMD\001806\SFOC_site\layout_rev7.mxd 14 September 2016 JPB)

Figure 2-4

SFOC Site Layout

2-13/2-14

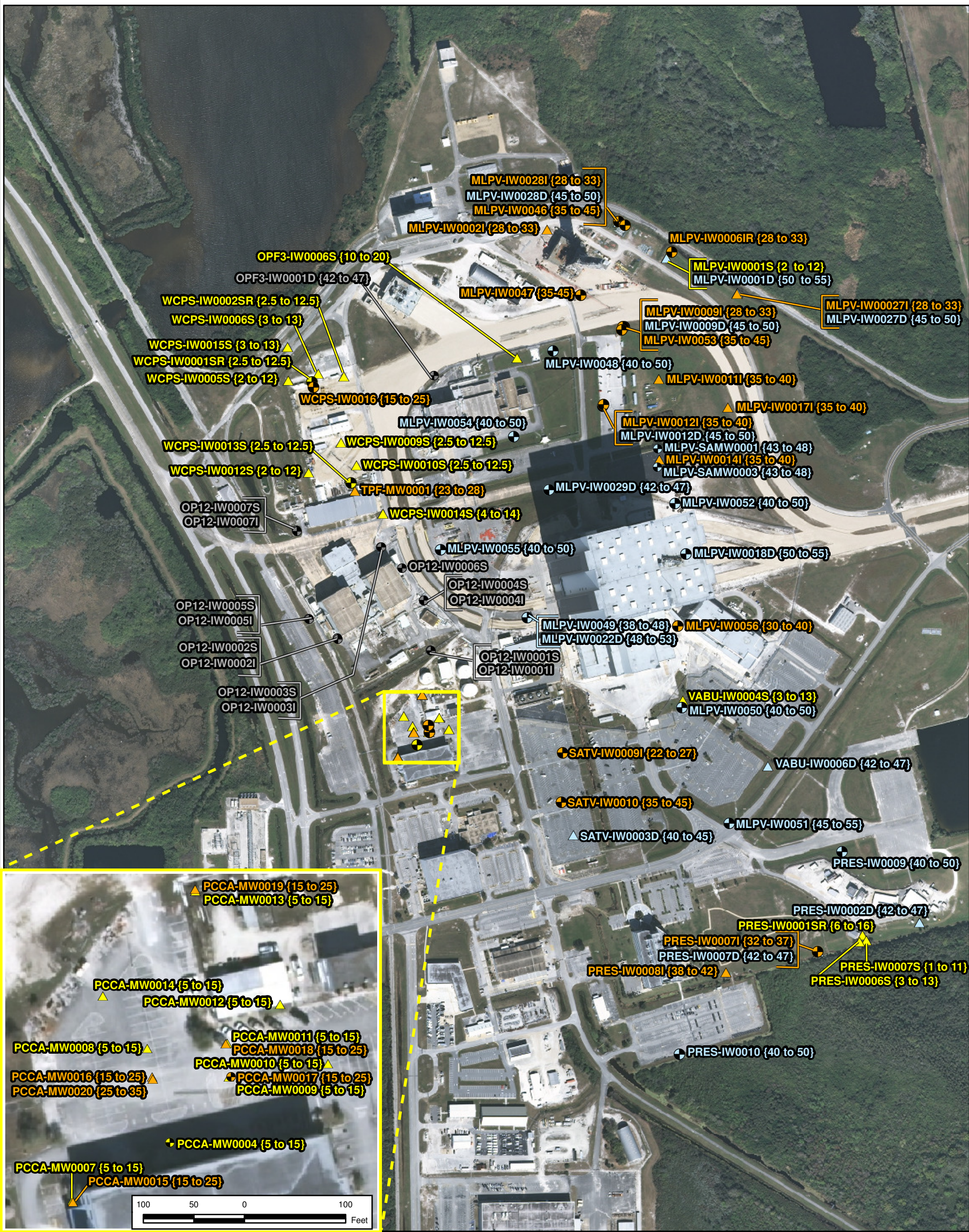


Figure 2-5
VAB Area Site Layout

Legend

- | | | | |
|---|---|---|--|
| ● | Shallow Monitoring Well Location {screen interval} | ▲ | Shallow Monitoring Well Location {screen interval} (Water Level Only Collected) |
| ● | Intermediate Monitoring Well Location {screen interval} | ▲ | Intermediate Monitoring Well Location {screen interval} (Water Level Only Collected) |
| ● | Deep Monitoring Well Location {screen interval} | ▲ | Deep Monitoring Well Location {screen interval} (Water Level Only Collected) |
| ● | Abandoned Monitoring Well Location | | |

500 250 0 500 Feet

Notes:
1. Screen interval is presented in feet, below land surface (ft. BLS).
2. OP12 wells (IW01S, IW01I, IW-02S, IW-02I, IW-03S, IW-03I, IW-04S, IW-04I, IW-05S, IW-05I, IW-06S, IW-07S, and IW-07I) and OPF3-IW01D were abandoned on November 10, 2015 by Jacobs-CORE as documented in the letter report entitled "Well Abandonments at Various Sites" dated 12 July 2016.

SECTION III

FIRE STATION 6 AREA (SWMU 106) RESULTS

3.1 WATER LEVELS AND GROUNDWATER FLOW DIRECTION

Groundwater levels in the FS6 Area were recorded on 25 May 2016 and are summarized in Table 3-1. In addition, select historical data of depth to groundwater and groundwater elevation data is summarized in this table. In general, the inferred direction of groundwater flow is to the south (Figure 3-1). This is generally consistent with prior observations of groundwater flow in the FS6 Area.

Hydrographs are presented on Figure 3-2. Generally, the hydrographs are similar in that they appear to show seasonal patterns with higher groundwater elevations in the fall than in the spring until May 2009. Groundwater elevations since May 2009 do not appear to exhibit a pattern, nor do they appear to be seasonally influenced. On average, groundwater levels decreased by approximately 0.6 feet between spring 2016 and fall 2014.

3.2 LABORATORY ANALYTICAL RESULTS

A summary of the historical and current analytical results for the wells sampled as part of this LTM plan are presented in Table 3-2. This table includes historical and current results associated with the contaminants of concern for this facility, namely VOCs. A summary of available vinyl chloride (VC) results for the past five years is provided on Figure 3-3. Laboratory analytical reports are presented in Appendix C.

The 2016 analytical results revealed no exceedances of the FDEP Groundwater Cleanup Target Levels (GCTL) for VC (of 1 µg/L) in the two monitoring wells sampled during this event, including FS6-MW0001 and FS6-MW0003. VC concentrations were observed below laboratory detection limits (Figure 3-3). These results are less than previous three years' results.

3.3 TREND ANALYSIS

Review of historical and current data for this facility indicates that VC is the constituent of concern. A time trend plot of VC concentrations detected in wells FS6-IW0001 and FS6-IW0003 is provided as Figure 3-2. Overall, there is a decreasing trend in VC concentrations in FS6-IW0001 and FS6-IW0003.

Table 3-1. FS6 Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft NAVD88)	6/28/10		11/20/12		5/13/13		11/25/13		11/19/14		5/25/16	
			Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
FS6-MW0001	25 to 35	1.12	1.10	0.02	0.90	0.22	0.25	0.87	1.06	0.06	0.35	0.77	0.76	0.36
FS6-MW0002	20 to 30	6.80	NM		6.53	0.27	5.79	1.01	6.75	0.05	5.90	0.90	6.64	0.16
FS6-MW0003	20 to 30	5.88	NM		5.97	-0.09	5.25	0.63	5.98	-0.10	5.34	0.54	5.94	-0.06

- Notes:**
1. BLS = Below Land Surface.
 2. BTOC = Below Top of Casing.
 3. ft = feet.
 4. TOC = Top of Casing.
 5. NM = Not Measured.
 6. NAVD88 = North American Vertical Datum of 1988.

Table 3-2. FS6 Summary of Historical Groundwater Data

Well ID:			FS6-MW0001						
Screened Interval (ft BLS):			25 to 35						
Sample Date:			Jul-09	Jun-10	Nov-12	May-13	Nov-13	Nov-14	May-16
Screening Criteria									
GCTL NADC									
VOCs (µg/L)									
Vinyl Chloride	1	100	3.1	1.6	2.5	2	2.8	2.2	0.50 U

Well ID:			FS6-MW0003				
Screened Interval (ft BLS):			20 to 30				
Sample Date:			Nov-12	May-13	Nov-13	Nov-14	May-16
Screening Criteria							
GCTL NADC							
VOCs (µg/L)							
Vinyl Chloride	1	100	0.44 U	3.7	5.2	4.7	0.50 U

Notes:

1. ft BLS = feet Below Land Surface.
2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
4. µg/L = micrograms per liter.
5. U = Undetected.
6. Yellow shaded, bold text indicates exceedance of GCTL.

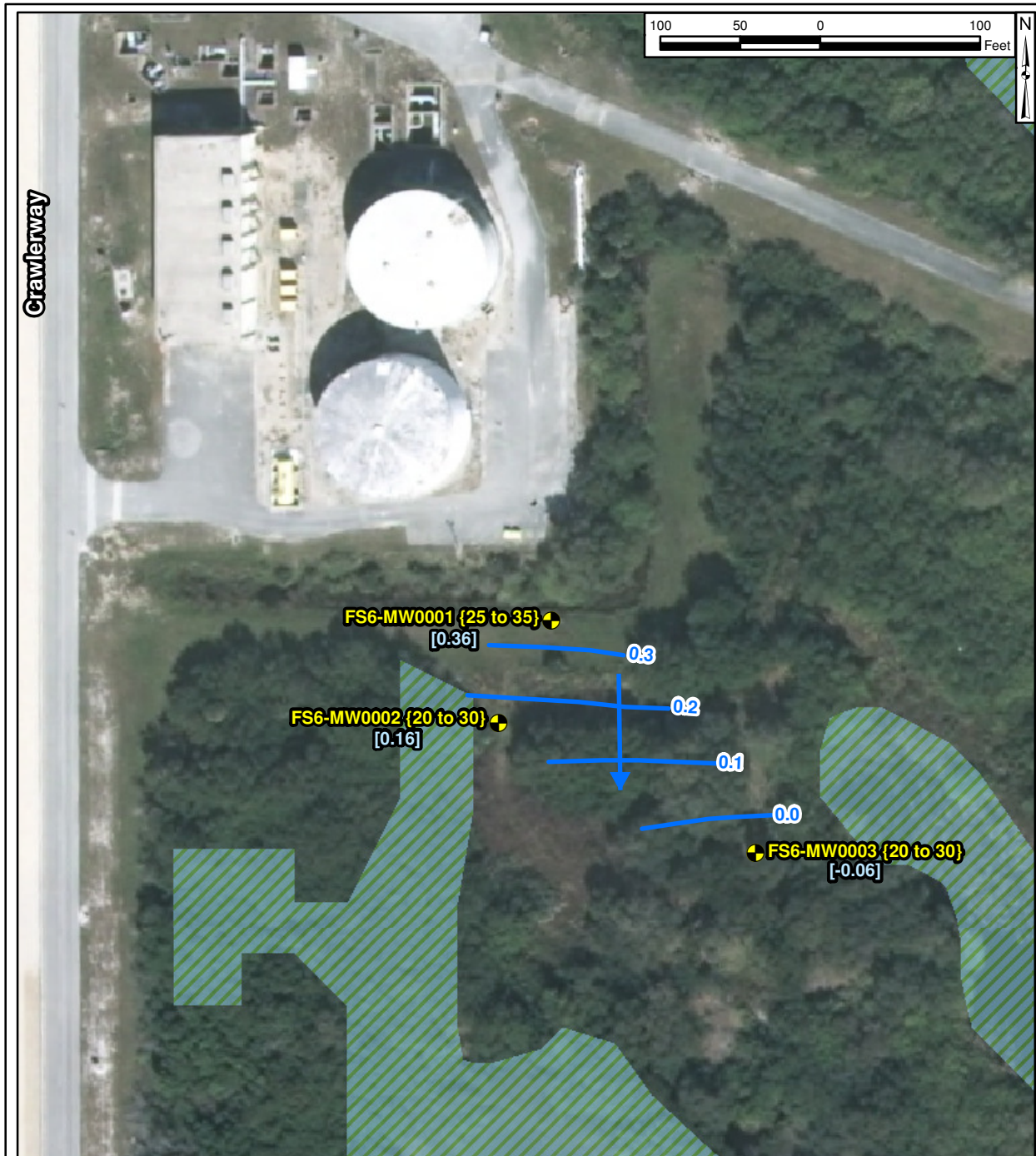






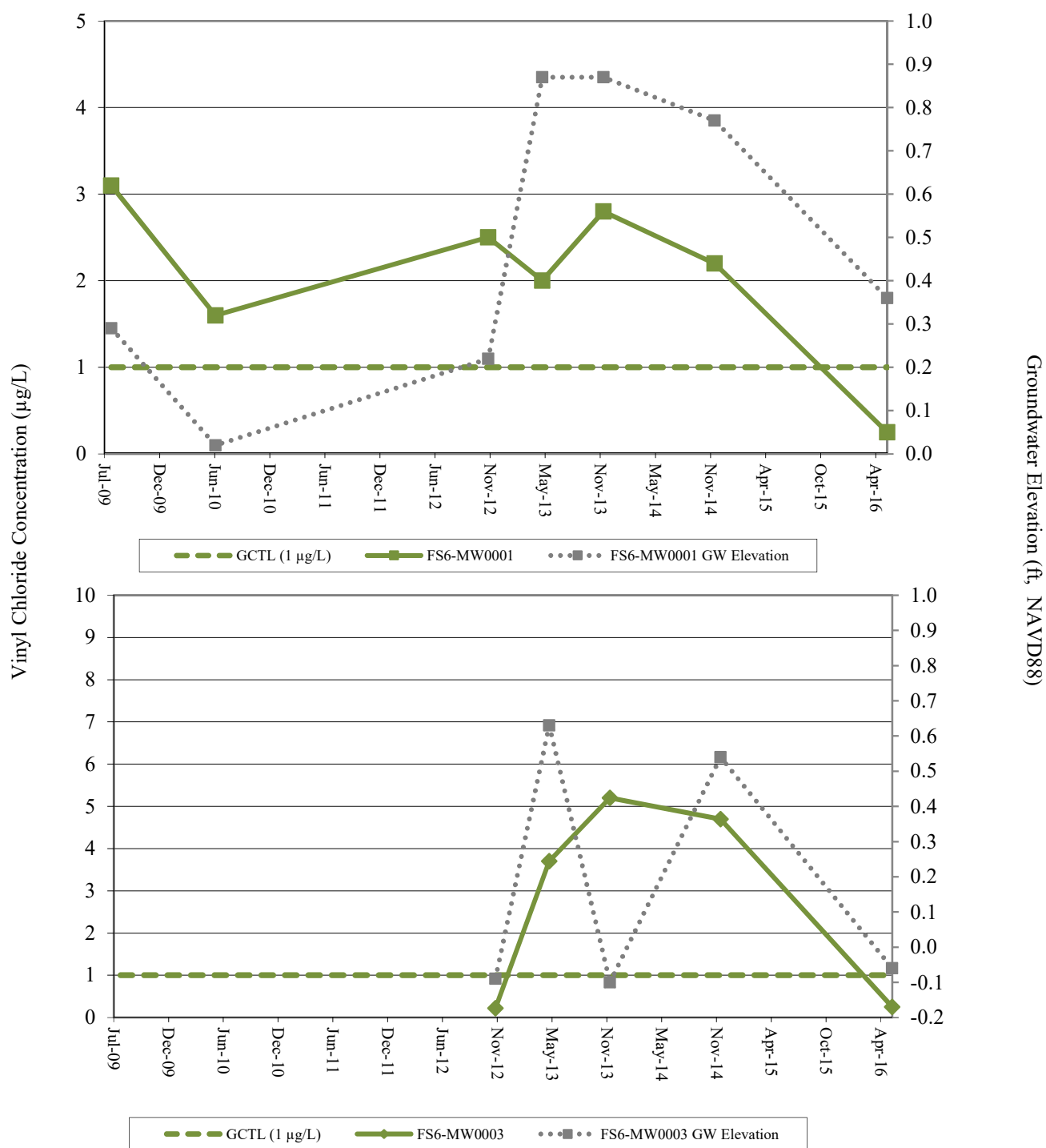
Figure 3-1
FS6 Shallow Zone Potentiometric Surface Map – May 2016

Legend

-  Monitoring Well Location showing screen interval (ft BLS)
- [0.16]** Groundwater Elevation (ft NAVD88)
-  Inferred Equipotential Line
-  Groundwater Flow Direction
-  Wetlands

Notes:

1. Depth is presented in feet below land surface.
2. NAVD88 indicates North American Vertical Datum 1988.

Figure 3-2. FS6 Hydrographs and Trend Plots of Vinyl Chloride

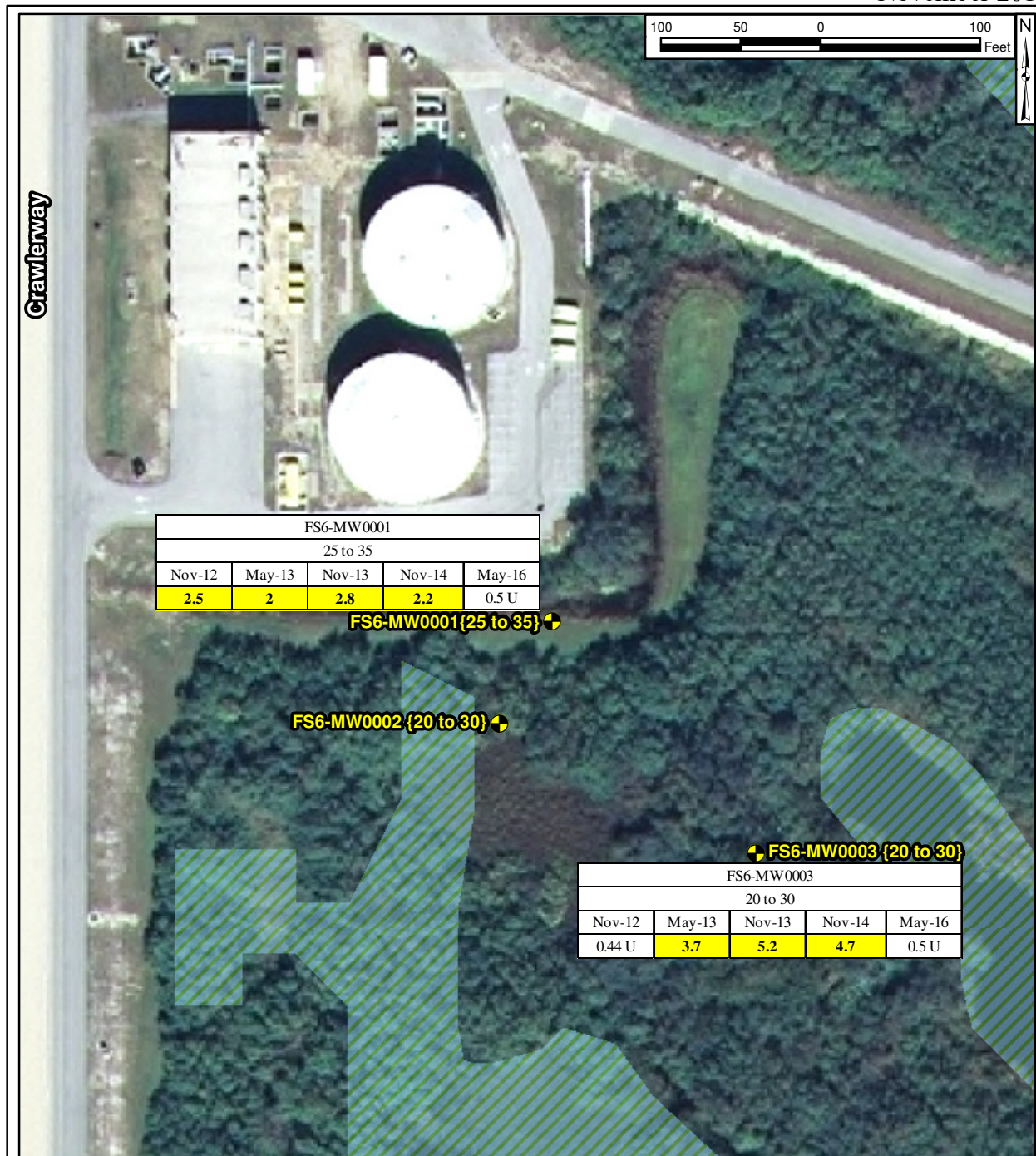


Figure 3-3
FS6 Summary of Vinyl Chloride Results

Legend



Monitoring Well Location
showing screen interval (ft BLS)



Wetlands

Screening Criteria		
Parameter	GCTL	NADC
Vinyl Chloride	1	100

Notes:

1. Screen intervals are presented in feet below land surface.
2. Results are presented in micrograms per liter.
3. U indicates not detected above method detection limit.
4. Yellow shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Level (GCTL).
5. NADC indicates FDEP Natural Attenuation Default Concentration.
6. Previous data reported in the FS6 Long-Term Monitoring Work Plan, June 2014.

SECTION IV

FORMER DEVELOPMENT AND TESTING LABORATORY (SWMU 75) RESULTS

4.1 WATER LEVELS AND GROUNDWATER FLOW DIRECTION

Groundwater levels were recorded on 25 May 2016 and are summarized in Table 4-1. Since FDTL was recently added to the sampling event, there is no historical data collected by Geosyntec. In general, shallow groundwater flow is to the east (Figure 4-1) and intermediate groundwater flow is to the west (Figure 4-2). This is generally consistent with prior observations of groundwater flow in the FDTL Area.

Hydrographs for the shallow and intermediate zones are presented on Figures 4-3 and 4-4, respectively. In general, historic groundwater elevation data appears to vary seasonally with elevations being higher in the fall than the spring. The shallow groundwater zone appears to be the most sensitive to seasonal influences, which is expected because it has more direct contact with atmospheric conditions and it is more readily affected by stormwater runoff and evapotranspiration than the intermediate zone. Aside from seasonal fluctuations, the overall trend indicates that groundwater elevations have generally been consistent in the intermediate zone. Groundwater elevation data collected in the intermediate and shallow zone during the 2016 sampling event are consistent with historic observations in both zones.

4.2 LABORATORY ANALYTICAL RESULTS

A summary of the historical and current analytical results for the wells sampled as part of this LTM plan are presented in Table 4-2. This table includes historical and current results associated with the contaminants of concern for this facility, namely VOCs. A summary of available TCE and VC results are provided on Figure 4-5. Laboratory analytical reports are presented in Appendix C.

The 2016 analytical results revealed exceedances of the FDEP GCTL for TCE (of 3 µg/L) in two monitoring wells sampled during this event, including FDTL-IW0009I and FDTL-IW0017I (from 4.2 to 5 µg/L). The results also revealed exceedances of the FDEP GCTL for VC (of 1 µg/L) in four monitoring wells sampled during this event, including FDTL-IW0008I, FDTL-IW0009I, FDTL-IW0015S, and FDTL-IW0019I (from 1.5 to 62 µg/L). The results also revealed cDCE was detected below GCTL (of 70 µg/L) in four wells sampled during this event, including FDTL-0007I, FDTL-0008I, FDTL-0009I, FDTL-0013I (from 8 to 23 µg/L).

4.3 TREND ANALYSIS

A statistical analysis of the LTM results for the FDTL Area wells was conducted using the Monitoring and Remediation Optimization System (MAROS) software package (output is included in Appendix E). The output indicated that the TCE concentration trend for the wells evaluated was as follows:

- FDTL-IW0007I, FDTL-IW0008I, FDTL-IW0013I, and FDTL-IW0019I showed decreasing trends;
- FDTL-IW0009I showed a probable decreasing trend; and
- FDTL-IW0015S, FDTL-IW0014I, and FDTL-IW0017I showed no trends.

The output indicated that the VC concentration trend for the wells evaluated was as follows: FDTL-IW0015S showed a decreasing trend;

- FDTL-IW0019I showed a probable increasing trend;
- FDTL-IW0013I, FDTL-IW0014I, FDTL-IW0017I showed stable trends; and
- FDTL-IW0007I, FDTL-IW0008I, FDTL-IW0009I, and FDTL-IW0019I showed no trends.

Table 4-1. FDTL Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft AMSL)	5/22/2014		05/25/16	
			Depth to Water (ft BTOC)	Water Elevation (ft AMSL)	Depth to Water (ft BTOC)	Water Elevation (ft AMSL)
Shallow Wells						
FDTL-IW0006S	5 to 15	3.86	NM		5.48	-1.62
FDTL-IW0015S	5 to 15	5.21	6.92	-1.71	6.82	-1.61
FDTL-IW0018I	5 to 15	4.44	NM		6.17	-1.73
Intermediate Wells						
FDTL-IW0003I	15 to 25	4.5	NM		5.91	-1.41
FDTL-IW0004I	15 to 25	4.72	6.29	-1.57	6.32	-1.60
FDTL-IW0005I	25 to 35	4.65	NM		6.34	-1.69
FDTL-IW0007I	10 to 20	2.15	3.82	-1.67	3.80	-1.65
FDTL-IW0008I	10 to 20	2.85	NM		4.39	-1.54
FDTL-IW0009I	10 to 20	2.11	3.81	-1.7	3.80	-1.69
FDTL-IW0010I	10 to 20	2.67	4.29	-1.62	4.30	-1.63
FDTL-IW0011I	10 to 20	4.13	NM		5.84	-1.71
FDTL-IW0012I	10 to 20	2.34	NM		3.96	-1.62
FDTL-IW0013I	10 to 20	4.97	-1.04	6.01	6.47	-1.50
FDTL-IW0014I	10 to 20	4.17	-2.22	6.39	6.90	-2.73
FDTL-IW0016I	10 to 20	3.92	NM		5.50	-1.58
FDTL-IW0017I	10 to 20	1.74	3.45	-1.71	3.40	-1.66
FDTL-IW0019I	10 to 20	3.26	4.82	-1.56	5.05	-1.79
FDTL-IW0020I	10 to 20	2.43	NM		4.25	-1.82

Notes:

1. BLS = Below Land Surface.
2. BTOC = Below Top of Casing.
3. ft = feet.
4. AMSL = Above Mean Sea Level.
5. TOC = Top of Casing.
6. Historical data (pre-2016) was obtained from the *Former Development and Testing Laboratory 2014 Annual Groundwater Monitoring Report* dated February 2015.
7. Bolded value not used in contouring the potentiometric surface.

Table 4-2. FDTL Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0007I						
			10 to 20						
			Mar-11	Sep-11	Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)									
Acetone	6300	63000	10 U	12 U	12 U	12 U	12 U	4.8 I	10 U
Trichloroethene	3	300	6.2	4.7	1.6	3.8	1.6	1.4 I	3
cis-1,2-Dichloroethene	70	700	10.1	9.9	6.3	36	13	6.9	8
trans-1,2-Dichloroethene	100	1000	0.35 U	1 U	1 U	1 U	1 U	0.73 U	0.50 U
1,1-Dichloroethene	7	700	0.23 U	1 U	1 U	1 U	1 U	0.94 U	0.50 U
Vinyl Chloride	1	100	0.22 U	1 U	1 U	1 U	20	17	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0013I				
			10 to 20				
			Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)							
Acetone	6300	63000	12 U	12 U	12 U	1.8 U	10 U
Trichloroethene	3	300	48	22	2.9	0.89 U	0.50 U
cis-1,2-Dichloroethene	70	700	16	68	78	65	23
trans-1,2-Dichloroethene	100	1000	1.1	6.3	11	9.3	4.4
1,1-Dichloroethene	7	700	1 U	1.2 J	1.5 I	0.94 U	0.50 U
Vinyl Chloride	1	100	1 U	1 U	1 U	0.71 U	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0014I				
			10 to 20				
			Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)							
Acetone	6300	63000	12 U	12 U	12 U	1.8 U	10 U
Trichloroethene	3	300	1 U	1 U	1 U	0.89 U	0.50 U
cis-1,2-Dichloroethene	70	700	1 U	1 J	1 U	0.53 U	0.50 U
trans-1,2-Dichloroethene	100	1000	1 U	1 U	1 U	0.73 U	0.50 U
1,1-Dichloroethene	7	700	1 U	1 U	1 U	0.94 U	0.50 U
Vinyl Chloride	1	100	1 U	1 U	1 U	0.71 U	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0008I					
			10 to 20					
			May-07	Dec-08	Mar-10	Sep-10	Mar-11	May-16
VOCs (µg/L)								
Acetone	6300	63000	25 U	10 U	10 U	10 U	10 U	14 I
Trichloroethene	3	300	186	78.8	7.9	2.3	1.1	0.82 I
cis-1,2-Dichloroethene	70	700	57.7	55	6.9	2.6	3.3	16
trans-1,2-Dichloroethene	100	1000	8.8	3.8	0.34 U	0.34 U	0.35 U	1.3
1,1-Dichloroethene	7	700	0.82 I	0.54 U	0.29 U	0.29 U	0.23 U	0.50 U
Vinyl Chloride	1	100	2.6	0.98 I	0.51 I	0.28 U	0.22 U	15

Notes:

6. Historical data (pre-2016) was obtained from the *Former Development and Testing Laboratory 2014 Annual Groundwater Monitoring Report* dated February 2015.

2. ft BLS = feet Below Land Surface.

3. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).

4. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
5. µg/L = micrograms per liter.

6. U = Undetected.

7. I = analyte detected below quantitation limits.

8. J = estimated value below the reporting limit.

9. Yellow shaded, bold text indicates exceedance of GCTL.

Table 4-2. FDTL Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW00091												
			10 to 20												
			Dec-08	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Sep-11	Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)															
Acetone	6300	63000	500 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	12 U	12 U	12 U	4.0 I	13 I
Trichloroethene	3	300	2520	9.5	0.92 I	7.2	14.1	13.6	11	5.6	6.9	5.1	7.7	6.3	5
cis-1,2-Dichloroethene	70	700	753	2.7	0.32 U	2.8	4.3	5.3	4.5	5.9	15	16	14	13	15
trans-1,2-Dichloroethene	100	1000	23 U	0.45 U	0.34 U	0.34 U	0.34 U	0.35 U	0.35 U	1 U	1 U	1 U	1 U	0.73 U	0.50 U
1,1-Dichloroethene	7	700	12 U	0.24 U	0.22 U	0.22 U	0.22 U	0.25 U	0.25 U	1 U	1 U	1 U	1 U	0.62 U	0.50 U
Vinyl Chloride	1	100	15 U	0.30 U	0.28 U	0.28 U	0.28 U	0.22 U	0.22 U	1 U	1 U	1 U	1 U	0.71 U	1.5

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0015S												
			5 to 15												
			Dec-08	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Sep-11	Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)															
Acetone	6300	63000	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	12 U	12 U	12 U	4.6 I	10 U
Trichloroethene	3	300	0.32 U	0.32 U	0.24 U	1	2.2	1.1	1.4	1 U	1	1 U	1 U	0.89 U	0.50 U
cis-1,2-Dichloroethene	70	700	1.5	1.2	0.96 I	0.75 I	1.2	0.81 I	0.92 I	0.62 J	9	1.4 J	1.6 I	1.3 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.45 U	0.45 U	0.34 U	0.34 U	0.34 U	0.35 U	0.35 U	1 U	1 U	1 U	1 U	0.73 U	0.50 U
1,1-Dichloroethene	7	700	0.54 U	0.54 U	0.29 U	0.29 U	0.29 U	0.23 U	0.23 U	1 U	1 U	1 U	1 U	0.94 U	0.58 I
Vinyl Chloride	1	100	79.2	45.8	23	13.5	14.6	10.8	10.8	2.9	2.6	14	17	12	15

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0017I							
			10 to 20							
			Jan-09	Mar-10	Dec-10	Feb-11	Mar-12	Sep-13	May-14	May-16
VOCs (µg/L)										
Acetone	6300	63000	12.8 I	10 U	10 U	10 U	12 U	12 U	5.1 I	10 U
Trichloroethene	3	300	0.32 U	0.24 U	0.42 I	0.31 I	1 U	1 U	1.1 I	4.2
cis-1,2-Dichloroethene	70	700	0.20 U	0.32 U	0.67 I	0.48 I	1 U	1 U	0.53 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.45 U	0.34 U	0.35 U	0.35 U	1 U	1 U	0.73 U	0.50 U
1,1-Dichloroethene	7	700	0.54 U	0.29 U	0.23 U	0.23 U	1 U	1 U	0.94 U	0.50 U
Vinyl Chloride	1	100	0.30 U	0.28 U	0.22 U	0.22 U	1 U	1 U	0.71 U	0.50 U




Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			FDTL-IW0019I									
			10 to 20									
			Dec-08	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Sep-13	May-14	May-16
VOCs (µg/L)												
Acetone	6300	63000	50 U	10 U	10 U	10 U	12 U	12 U	12 U	12 U	4.7 I	10 U
Trichloroethene	3	300	251	3.7	1.5	0.86 I	0.62 J	1.2	2.2	1 U	0.89 U	0.50 U
cis-1,2-Dichloroethene	70	700	159	4.6	1.7	1.3	0.89 J	0.93 J	4.5	0.69 I	0.53 U	0.50 U
trans-1,2-Dichloroethene	100	1000	11.9	3.2	1.4	1.2	1 U	1.4	1.2 J	1.7 I	0.86 I	1.0
1,1-Dichloroethene	7	700	1.2 U	0.22 U	0.22 U	0.25 U	1 U	1 U	1 U	1 U	0.62 U	0.50 U
Vinyl Chloride	1	100	3.1 I	83	31.6	27	6.6	58	64	84	62	62

- Notes:
1. Results presented prior to May 2016 were not collected by Geosyntec Representatives.
2. ft BLS = feet Below Land Surface.
3. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
4. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
5. µg/L = micrograms per liter.
6. U = Undetected.
7. I = analyte detected below quantitation limits.
8. J = estimated value below the reporting limit.
9. Yellow shaded, bold text indicates exceedance of GCTL.



Figure 4-1
FDTL Shallow Zone Potentiometric Surface Map – May 2016

Legend

-  Monitoring Well Location showing screen interval (ft BLS)
- [-1.61]** Groundwater Elevation (ft NAVD88)
-  Equipotential Line
-  Groundwater Flow Direction

100 50 0 100
Feet



Notes:

1. Depth is presented in feet below land surface.
2. NAVD88 indicates North American Vertical Datum 1988.

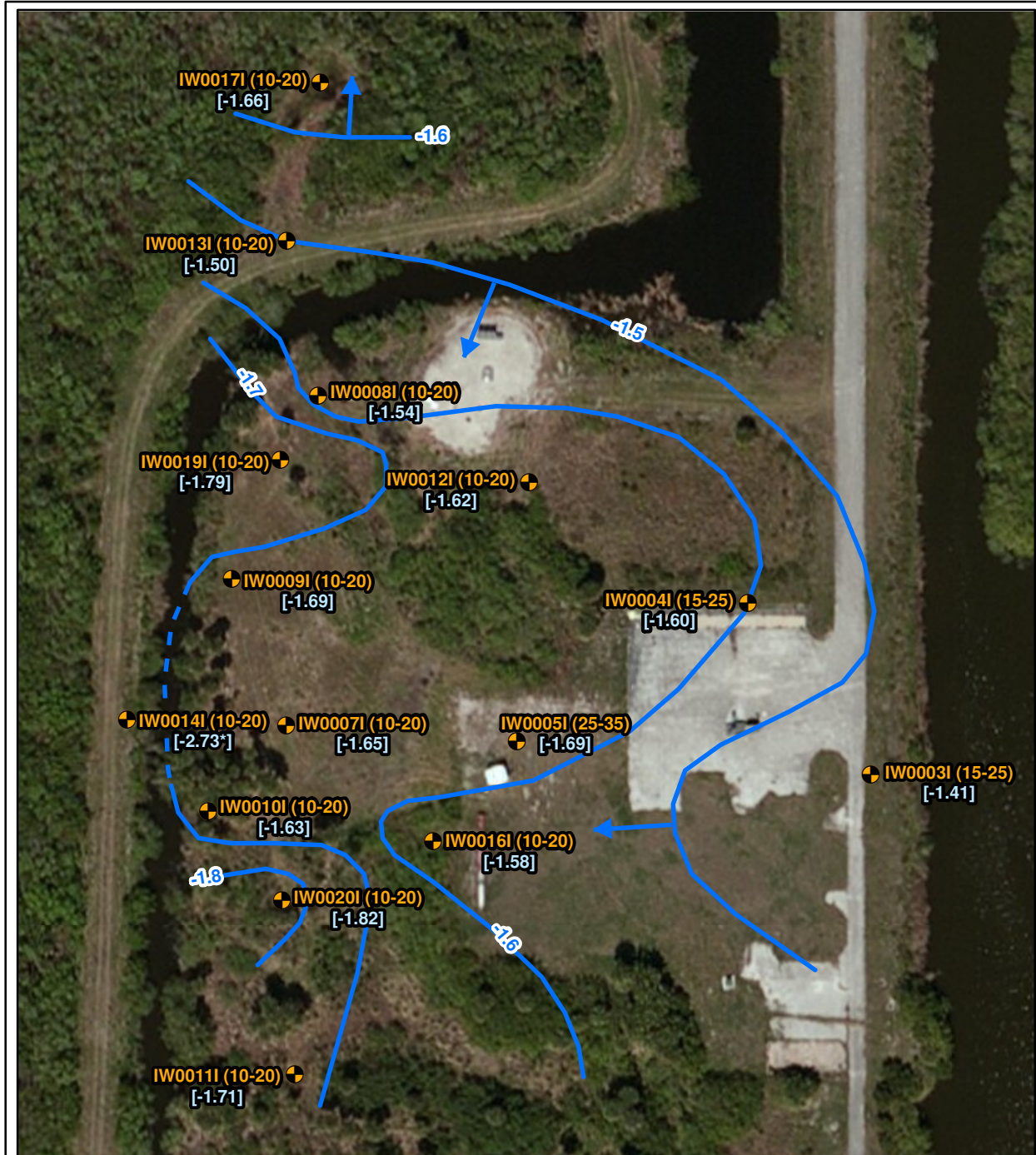






Figure 4-2
FDTL Intermediate Zone Potentiometric Surface Map – May 2016

Legend

-  Monitoring Well Location showing screen interval (ft BLS)
- [-1.62]** Groundwater Elevation (ft NAVD88)
-  Inferred Equipotential Line
-  Equipotential Line
-  Groundwater Flow Direction

100 50 0 100
Feet

Notes:

1. Depth is presented in feet below land surface.
2. NAVD88 indicates North American Vertical Datum 1988.
3. * indicates FDTL AGMWR states IW00141 was not used in contouring as well was repaired and should be resurveyed.

Figure 4-3
FDTL-IW0015S Hydrograph and Trend Plot of Vinyl Chloride and Trichloroethene

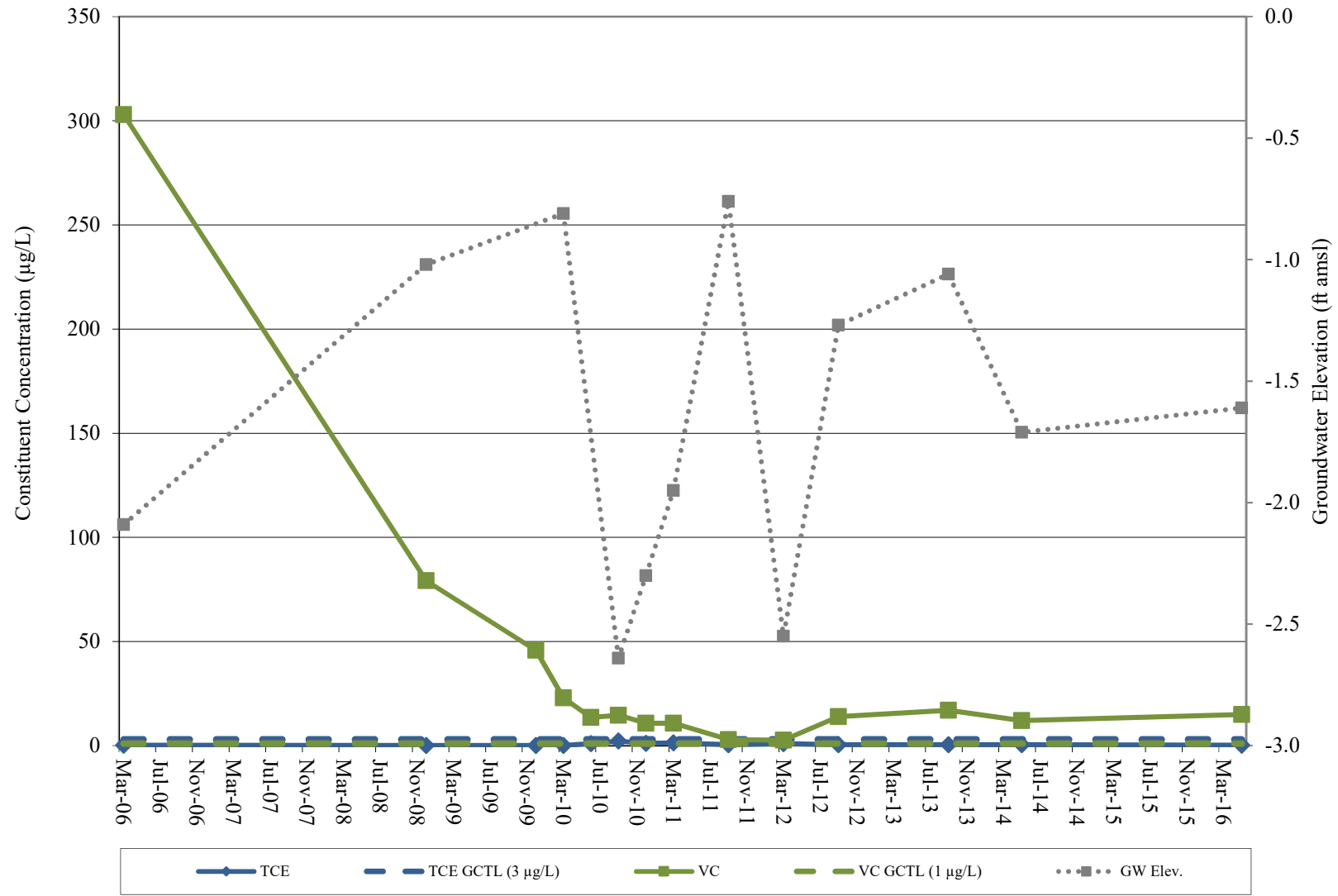
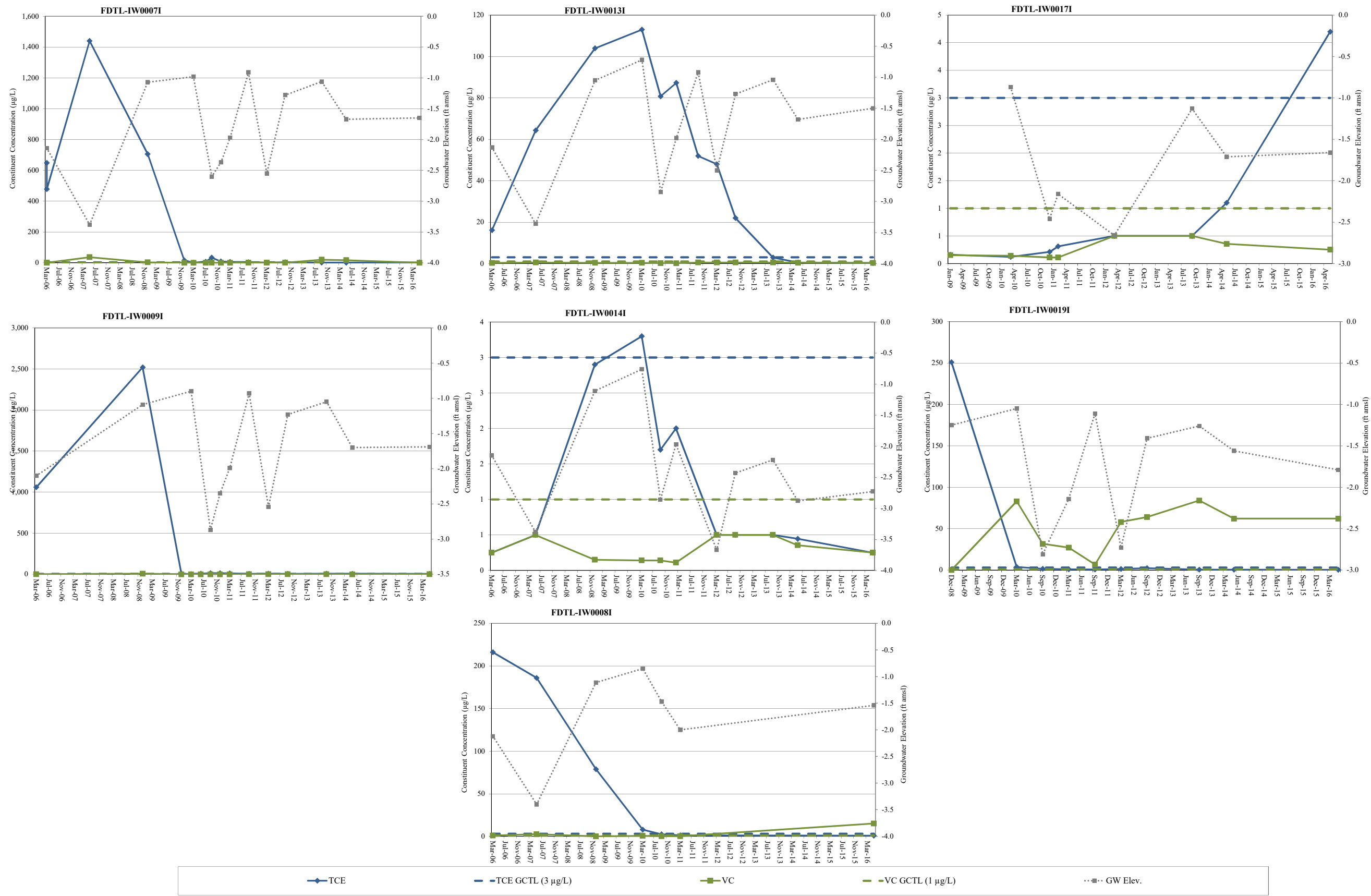


Figure 4-4. FDTL Area Hydrographs and Trend Plots of Vinyl Chloride (VC) and Trichloroethylene (TCE) in Intermediate Wells



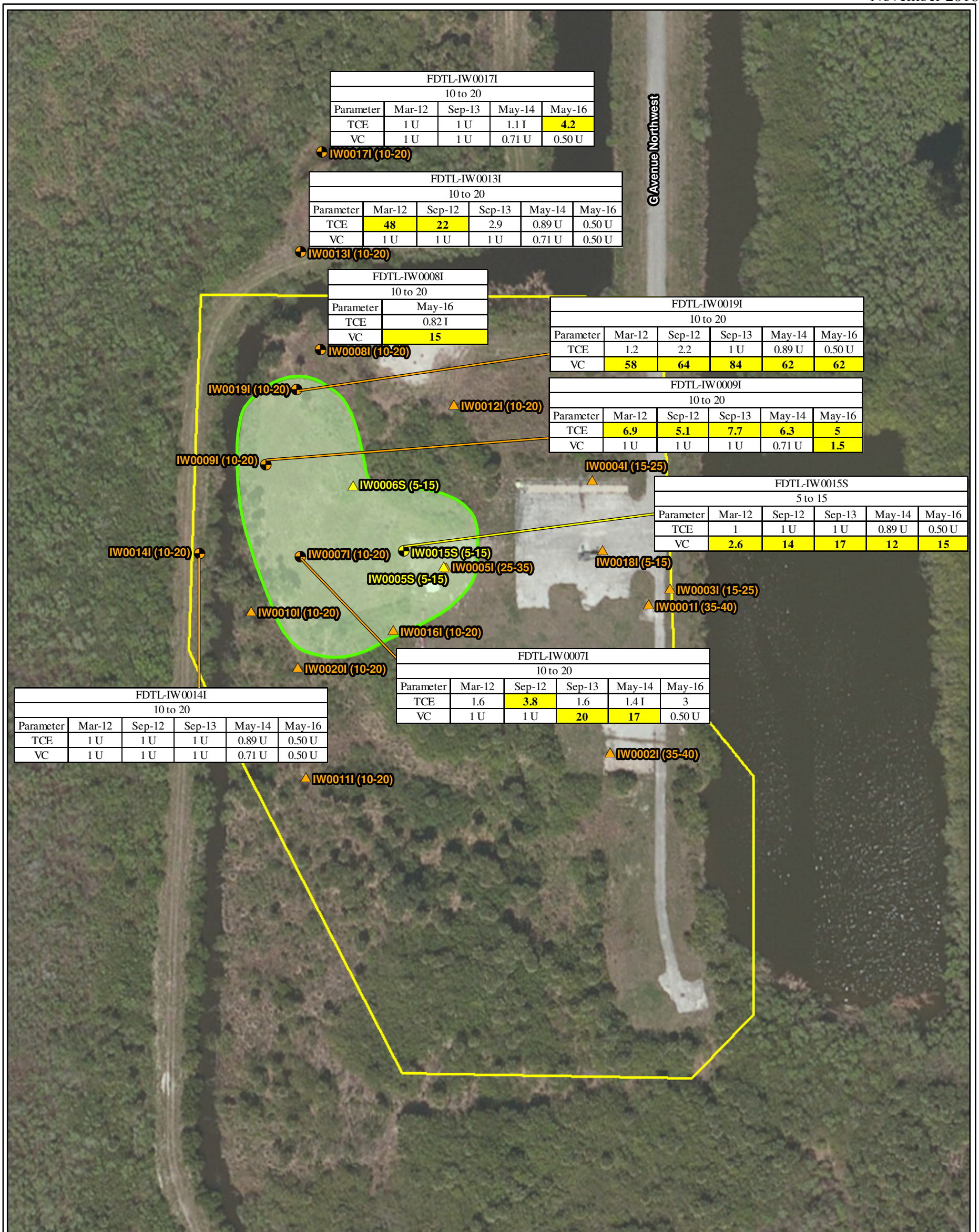








Figure 4-5
FDTL Area Summary of Trichloroethene and Vinyl Chloride Results in Groundwater

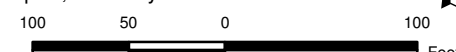
Legend

- | | | | | |
|---|---|--|----|---|
|  | Shallow Monitoring Well Location {screen interval} | <table border="1"> <tr> <td>Tr</td> </tr> <tr> <td>V</td> </tr> </table> | Tr | V |
| Tr | | | | |
| V | | | | |
|  | Shallow Monitoring Well Location {screen interval}
(Water Level Only Collected) | | | |
|  | Intermediate Monitoring Well Location {screen interval} | | | |
|  | Intermediate Monitoring Well Location {screen interval}
(Water Level Only Collected) | | | |
|  | Aggressive Remediation Zone | | | |
|  | Former Development Testing Lab | | | |

Screening Criteria			
Parameter	Abbreviation	GCTL	NADC
Trichloroethene	TCE	3	300
Vinyl Chloride	VC	1	100

Notes:

1. Screen interval is presented in feet, below land surface (ft, BLS).
2. Results presented in $\mu\text{g/L}$.
3. I indicates analyte detected below quantitation limits.
4. U indicates undetected.
5. GCTL indicates Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
6. NADC indicates Natural Attenuation Default Concentration (Chapter 62-777, FAC).
7. Yellow shaded, bold text indicates exceedance of GCTL.
8. Previous data reported in the FDTL Corrective Measures Implementation 2014 Annual Groundwater Monitoring Report, February 2015.



SECTION V

C-5 ELECTRICAL SUBSTATION AREA (SWMU 66) RESULTS

5.1 WATER LEVELS AND GROUNDWATER FLOW DIRECTION

Groundwater levels in the C-5ES Area were collected on 27 May 2016 and are summarized in Table 5-1. In addition, select historical data of depth to groundwater and groundwater elevation data is summarized in this table. The inferred groundwater flow in the shallow zone in May 2016 was generally to the west (Figure 5-1). The inferred groundwater flow in the intermediate zone in May 2016 was to the west (Figure 5-2). This is generally consistent with prior observations of groundwater flow at the site.

Hydrographs for the shallow and intermediate zones are presented on Figures 5-3 and 5-4, respectively. The hydrographs indicate that there was a slight decrease in groundwater elevations measured in shallow and intermediate monitoring wells. In general, historic groundwater elevation data appears to vary seasonally with elevations being higher in the fall than the spring. The shallow groundwater zone appears to be the most sensitive to seasonal influences, which is expected because it has more direct contact with atmospheric conditions and it is more readily affected by stormwater runoff and evapotranspiration than the intermediate zone. Aside from seasonal fluctuations, the overall trend indicates that groundwater elevations have generally been consistent in the intermediate zone. Groundwater elevation data collected in the intermediate and shallow zone during the 2016 sampling event are consistent with historic observations in both zones. On average, groundwater elevations in the shallow and intermediate zones were less than 1 foot lower in spring 2016 than fall 2014.

5.2 LABORATORY ANALYTICAL RESULTS

A summary of the historical and current analytical results (May 2007 to the present) for the wells sampled, as part of this LTM plan, are presented in Table 5-2. This table has been constructed to include historical and current results associated with the contaminants of concern for this area, primarily VOCs. A summary of the 2016 VC analytical results, in addition to VC results from the previous five years, is provided on Figure 5-5. Laboratory analytical reports are presented in Appendix C.

The 2016 analytical results revealed exceedances of the FDEP GCTL for VC of 1 microgram per liter ($\mu\text{g/L}$) in two monitoring wells sampled during this event; shallow well C5ES-MW0018S and intermediate well C5ES-MW0019I. VC concentrations, above the GCTL, ranged from 23 $\mu\text{g/L}$ to 29 $\mu\text{g/L}$, as shown in Table 5-2 and on Figure 5-5. VC was not detected above the Natural

Attenuation Default Concentration (NADC) of 100 µg/L in C5ES-MW0018S (23 µg/L) and C5ES-MW0019I (29 µg/L). These results are consistent with the November 2014 results.

5.3 TREND ANALYSIS

A statistical analysis of the LTM results for the C5ES Area wells was conducted using the Monitoring and MAROS software package (output is included in Appendix E). The output indicated that the VC concentration trend for the wells evaluated was as follows:

- C5ES-MW0012S, C5ES-MW0017S, C5ES-MW0010I and C5ES-MW0012I showed decreasing trends;
- C5ES-MW0018S showed a probable increasing trend; and
- C5ES-MW0019I showed a stable trend.

Although C5ES-MW0018S VC concentrations have remained below NADC since November 2014, the monitoring well has an increasing trend with data sourced from 1999 through 2016 is used in MAROS. When a five-year dataset (sourced from 2012 to 2016) is used in MAROS, C5ES-MW0018S has a decreasing trend.

Table 5-1. C5ES Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft NAVD88)	05/19/10		11/09/10		05/09/11		10/28/11		11/28/12		5/30-31/13		11/19/14		05/27/16	
			Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
Shallow Wells																		
C5ES-MW0001S	5 to 15	7.66	6.57	1.09	7.61	0.05	8.15	-0.49	6.91	0.75	7.26	0.40	7.29	0.37	6.64	1.02	7.35	0.31
C5ES-MW0002S	5 to 15	6.74	5.53	1.21	6.57	0.17	7.09	-0.35	5.77	0.97	6.34	0.40	6.20	0.54	5.58	1.16	6.30	0.44
C5ES-MW0003S	5 to 15	6.84	5.73	1.11	6.80	0.04	7.32	-0.48	6.06	0.78	6.37	0.47	6.47	0.37	5.81	1.03	6.50	0.34
C5ES-MW0004S	5 to 15	6.64	5.48	1.16	6.71	-0.07	7.29	-0.65	6.04	0.60	6.29	0.35	6.50	0.14	5.80	0.84	6.46	0.18
C5ES-MW0005S	5 to 15	7.11	6.12	0.99	7.13	-0.02	7.67	-0.56	6.38	0.73	6.82	0.29	6.81	0.30	6.13	0.98	6.92	0.19
C5ES-MW0007S	5 to 15	8.10	6.64	1.46	7.57	0.53	8.40	-0.30	7.04	1.06	7.40	0.70	7.12	0.98	NM		NM	
C5ES-MW0008S	3 to 13	8.52	7.31	1.21	8.36	0.16	8.86	-0.34	7.60	0.92	8.01	0.51	7.97	0.55	7.29	1.23	NM	
C5ES-MW0009S	5 to 15	8.33	7.21	1.12	8.24	0.09	8.76	-0.43	7.51	0.82	7.89	0.44	7.91	0.42	7.23	1.10	NM	
C5ES-MW0010S	10 to 15	7.89	7.49	0.40	8.10	-0.21	8.91	-1.02	7.43	0.46	7.63	0.26	7.97	-0.08	7.29	0.60	7.89	0.00
C5ES-MW0011S	10 to 15	4.40	NM		2.37	-0.28	2.99	1.41	1.78	0.31	NM		NM		3.80	0.60	4.55	-0.15
C5ES-MW0012S	10 to 15	2.10	1.59	0.51	2.31	-0.21	2.91	-0.81	1.68	0.42	1.56	0.54	2.20	-0.10	1.43	0.67	2.10	0.00
C5ES-MW0013S	9.5 to 14.5	7.98	6.80	1.18	7.57	0.41	7.92	0.06	6.87	1.11	7.42	0.56	7.24	0.74	6.82	1.16	7.32	0.66
C5ES-MW0016S	7 to 12	5.05	5.35	-0.30	5.53	-0.48	6.19	-1.14	5.14	-0.09	4.79	0.26	NM		4.91	0.14	5.40	-0.35
C5ES-MW0017S	7 to 12	3.23	4.78	-1.55	4.73	-1.50	4.35	-1.12	3.39	-0.16	3.02	0.21	5.50	-2.27	3.10	0.13	3.60	-0.37
C5ES-MW0018S	7 to 12	3.47	4.55	-1.08	3.93	-0.46	4.56	-1.09	3.57	-0.10	3.31	0.16	2.95	0.52	3.29	0.18	3.82	-0.35
C5ES-PZ0001	5 to 15	7.57	6.56	1.01	7.60	-0.03	8.23	-0.66	6.46	1.11	7.13	0.44	7.15	0.42	6.69	0.88	7.26	0.31
Intermediate Wells																		
C5ES-MW0001I	28 to 33	7.98	6.56	1.42	7.67	0.31	7.43	0.55	6.61	1.37	7.41	0.57	6.56	1.42	6.94	1.04	7.56	0.42
C5ES-MW0003I	28 to 33	6.86	6.91	-0.05	6.81	0.05	7.32	-0.46	6.12	0.74	6.44	0.42	6.52	0.34	5.89	0.97	7.56	-0.70
C5ES-MW0004I	28 to 33	6.88	6.15	0.73	6.97	-0.09	7.55	-0.67	6.25	0.63	6.57	0.31	6.74	0.14	6.07	0.81	6.75	0.13
C5ES-MW0010I	20 to 25	8.04	7.70	0.34	8.28	-0.24	8.89	-0.85	7.72	0.32	7.73	0.31	8.13	-0.09	7.46	0.58	8.06	-0.02
C5ES-MW0012I	20 to 25	2.05	1.78	0.27	2.31	-0.26	2.95	-0.90	1.84	0.21	1.81	0.24	2.20	-0.15	1.50	0.55	2.15	-0.10
C5ES-MW0013I	33 to 38	8.03	6.78	1.25	7.60	0.43	7.97	0.06	6.82	1.21	7.39	0.64	7.19	0.84	6.75	1.28	7.33	0.70
C5ES-MW0014I	33 to 38	4.81	3.56	1.25	4.30	0.51	4.74	0.07	3.65	1.16	4.15	0.66	3.96	0.85	3.50	1.31	4.12	0.69
C5ES-MW0015I	33 to 38	4.47	3.12	1.35	3.92	0.55	4.26	0.21	3.19	1.28	3.76	0.71	3.51	0.96	NM		NM	
C5ES-MW0019I	13 to 23	2.56	2.15	0.41	2.76	-0.20	3.36	-0.80	2.02	0.54	2.31	0.25	2.65	-0.09	1.92	0.64	2.60	-0.04

- Notes:
- ft = feet.
 - BLS = Below Land Surface.
 - TOC = Top of Casing.
 - NAVD88 = North American Vertical Datum 1988.
 - BTOC = Below Top of Casing.
 - NM = Not Measured.

Table 5-2. C5ES Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0010I 20 to 25													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Chlorobenzene	100	1000	0.50 U	0.20 U	0.25 I	0.22 U	0.22 U	0.15 U	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Tetrachloroethene	3	300	0.50 U	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 I	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U
Trichloroethene	3	300	0.76 I	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	3.5	0.28 U	2.6	0.5 I	2.3	0.7 I	0.38 I	0.75 I	0.66 I	0.37 I	0.55 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.75 I	0.20 U	1.6	0.45 U	1.8	0.68 I	0.39 U	0.49 I	0.46 I	0.34 I	0.64 I	0.43 I	0.50 U	0.50 U
1,1-Dichloroethane	70	700	10.2	0.25 U	39.7	3.2	37.5	9.4	1.3	1.9	1.2	0.46 I	2.3	0.13 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl chloride	1	100	18.8	0.34 U	92.6	6.7	59.5	17	3.6	5.3	4.7	0.22 U	6.7	2.0	0.63 I	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0012S													
			10 to 15													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Chlorobenzene	100	1000	2.1	0.88 I	8.7	1.7	13.7	1.9	3.1	1.3	3.3	2.6	2.6	4.8	3.9	4.1
Tetrachloroethene	3	300	0.50 U	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U
Trichloroethene	3	300	0.50 U	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.50 U	2.2	0.58 I	0.48 I	0.31 I	0.41 I	0.35 I	1.1	0.36 U	0.99 I	0.91 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.64 I	0.81 I	0.45 U	0.45 U	0.13 U	0.39 U	0.4 I	0.15 I	0.41 I	0.35 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethane	70	700	0.53 I	0.81 I	0.85 I	0.24 U	0.25 I	0.56 U	0.37 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl chloride	1	100	7.3	17.0	21.5	1.2	3.1	3.9	0.16 U	5.4	1.4	10	5.0	0.22 U	0.50 U	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0012I													
			20 to 25													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Chlorobenzene	100	1000	0.50 U	0.20 U	0.32 I	0.22 U	0.29 I	0.15 U	0.91 I	0.24 I	0.47 I	0.41 I	0.22 I	0.16 U	0.50 U	0.50 U
Tetrachloroethene	3	300	0.50 U	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U
Trichloroethene	3	300	0.50 U	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	1.1	0.96 I	2.1	4.6	2.2	2.6	1.7	1.5	1.3	1.1	0.59 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.57 I	0.20 U	1.1	1.1	1.3	1.2	0.43 I	0.44 I	0.78 I	0.57 I	0.62 I	0.12 U	0.50 U	0.65 I
1,1-Dichloroethane	70	700	1.4	0.25 U	1.4	1.9	1.6	1.3	0.37 U	0.13 U	0.43 I	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl chloride	1	100	4.1	3.0	10.4	26.9	7.6	13	9.9	1.1	4.5	2.3	2.4	0.22 U	0.50 U	0.50 U

Notes:

- 1. ft BLS = feet Below Land Surface.
- 2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
- 3. I = analyte detected below quantitation limits.
- 4. J = estimated value below the reporting limit.
- 5. Q = Holding time exceeded.

- 6. U = Undetected.
- 7. µg/L = micrograms per liters.
- 8. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
- 9. Yellow shaded, bold text indicates exceedance of GCTL.
- 10. Orange shaded, bold text indicates exceedance of GCTL and NADC.

- 11. NA = Not Analyzed.

Table 5-2. C5ES Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0017S													
			7 to 12													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Chlorobenzene	100	1000	5.8	2.3	4.8	5.8	5.1	3.7	5.6	6.4	4.5	2.2	1.6	0.16 U	0.50 U	0.95 I
Tetrachloroethene	3	300	0.50 U	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U
Trichloroethene	3	300	0.50 U	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.66 I	0.28 U	0.52 I	0.38 I	0.63 I	0.43 I	0.31 I	0.36 U	0.56 I	0.52 I	0.59 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.65 I	0.20 U	0.64 I	0.49 I	0.69 I	0.54 I	0.39 U	0.29 I	0.43 I	0.3 I	0.30 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethane	70	700	0.51 I	0.25 U	0.44 I	0.38 I	0.43 I	0.56 U	0.37 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl chloride	1	100	4.5	0.34 U	4.8	4.5	5.1	2.7	3.9	1.4	1.5	0.68 I	0.52 I	0.22 U	0.50 U	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0018S													
			7 to 12													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Chlorobenzene	100	1000	0.50 U	0.20 U	0.3 I	0.23 I	0.37 I	0.15 U	0.42 U	0.31 I	0.22 I	0.16 U	0.37 I	0.16 U	0.50 U	0.50 U
Tetrachloroethene	3	300	0.50 U	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U
Trichloroethene	3	300	0.50 U	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	3.4	7.2	8.7	1.6	4.9	31	0.68 I	4.3	1.6	1.3	1.5	0.85 I	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	3.4	6.6	6.2	5.2	9.4	13	3.6	6.6	5.1	4.3	8.6	7.7	3.9	1.7
1,1-Dichloroethane	70	700	7.5	9.4	9.5	5.9	13.4	9.2	2.1	3.8	2.7	2.1	3.5	2.8	1.3	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl chloride	1	100	84.6	116	129	121	174	210	71	130	130	110	170	160	96	23

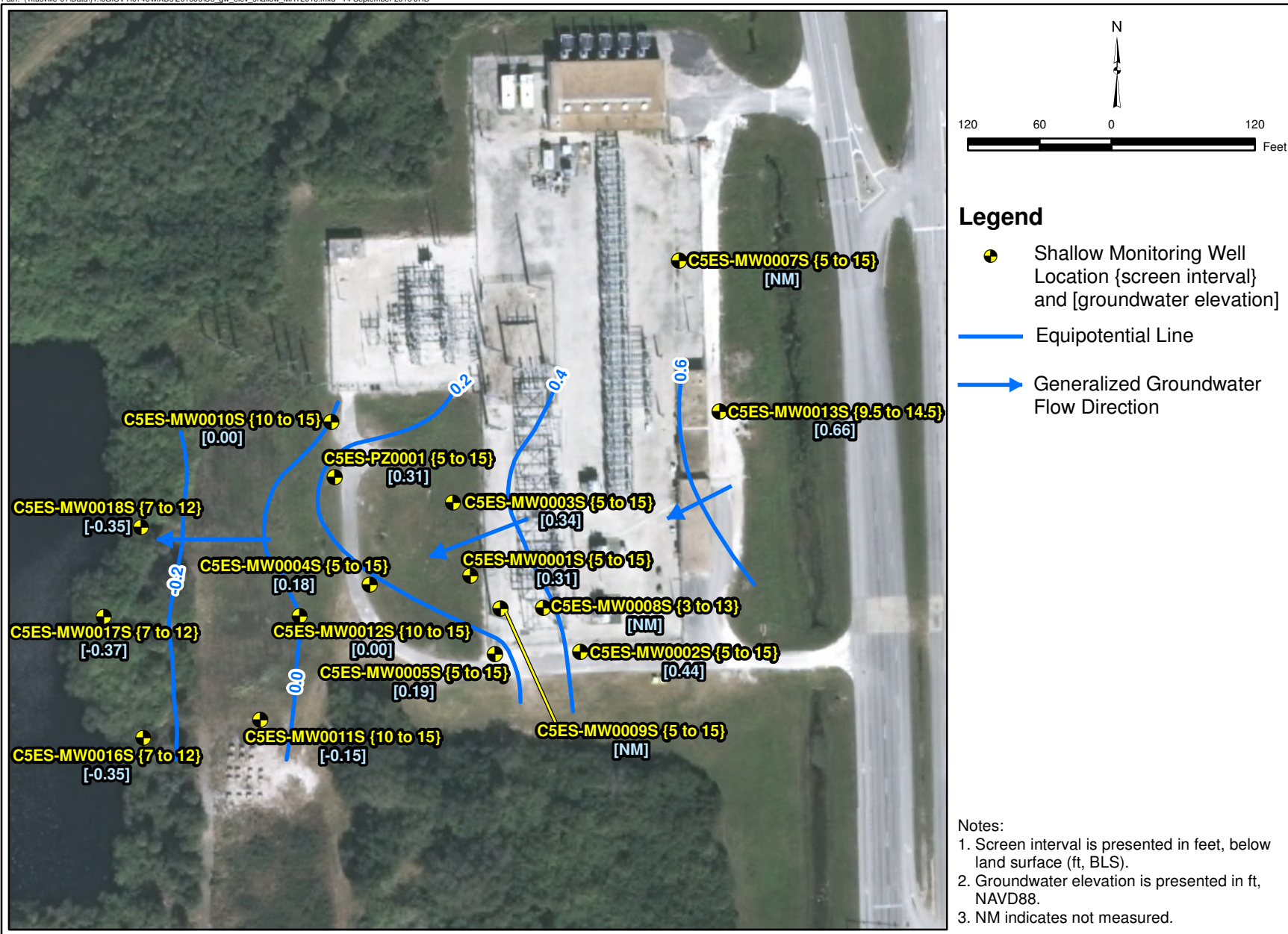
Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			C5ES-MW0019I													
			13 to 23													
			Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	
VOCs (µg/L)																
Chlorobenzene	100	1000	0.20 U	0.89 I	0.57 I	0.65 I	0.43 I	0.42 U	0.41 I	0.44 I	0.34 I	0.45 I	0.16 U	0.50 U	0.50 U	
Tetrachloroethene	3	300	0.25 U	0.25 U	0.22 U	0.22 U	0.22 U	0.17 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.58 U	0.58 U	
Trichloroethene	3	300	0.38 U	0.38 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U	
cis-1,2-Dichloroethene	70	700	12.3	6.2	3.4	2.6	1.6	6.4	9.6	7.1	6.7	1.2	37	0.50 U	0.50 U	
trans-1,2-Dichloroethene	100	1000	8.2	8.4	8	6.5	5.9	5.9	7.2	8	7.4	7.8	9.8	0.50 U	1.7	
1,1-Dichloroethane	70	700	20.5	16.6	15.6	10.2	8.7	6.8	6.1	5.9	4.8	4.2	2.3	0.50 U	0.50 U	
1,1-Dichloroethene	7	700	0.23 U	0.23 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U	
Vinyl chloride	1	100	189	206	183	101	120	140	150	180	190	160	180	5.4	29	

Notes:

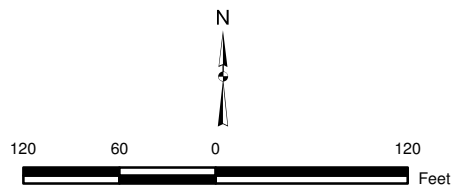
1. ft BLS = feet Below Land Surface.
2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
3. I = analyte detected below quantitation limits.
4. J = estimated value below the reporting limit.
5. Q = Holding time exceeded.

6. U = Undetected.
7. µg/L = micrograms per liters
8. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
9. Yellow shaded, bold text indicates exceedance of GCTL.
10. Orange shaded, bold text indicates exceedance of GCTL and NADC.

11. NA = Not Analyzed.



November 2016



Legend

- Intermediate Monitoring Well Location {screen interval} and [groundwater elevation]
- Equipotential Line
- Generalized Groundwater Flow Direction

- Notes:
1. Screen interval is presented in feet, below land surface (ft. BLS).
 2. Groundwater elevation is presented in ft, NAVD88.
 3. * indicates not used in contouring.

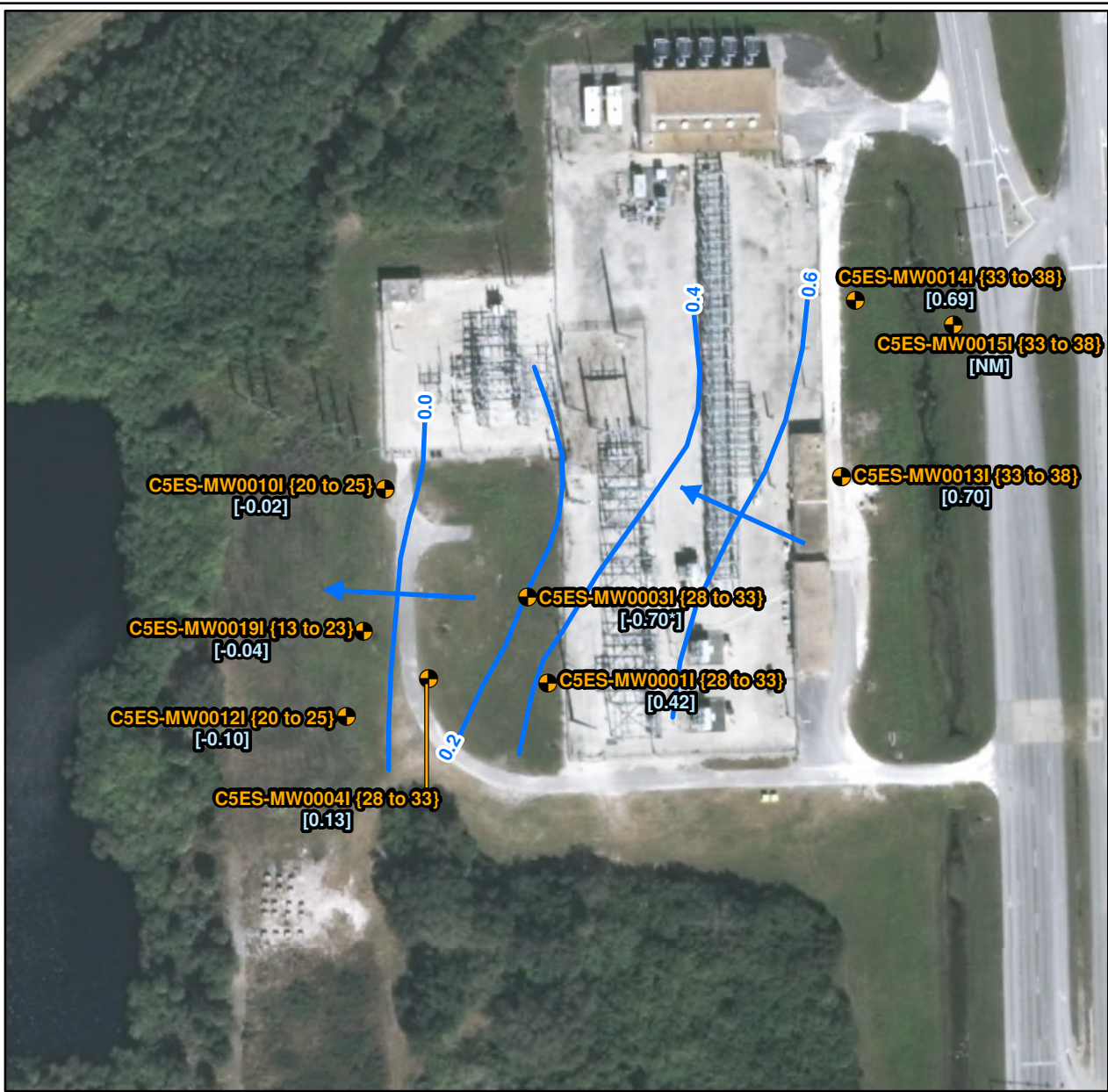


Figure 5-2
C5ES Intermediate Zone Potentiometric
Surface Map - May 2016

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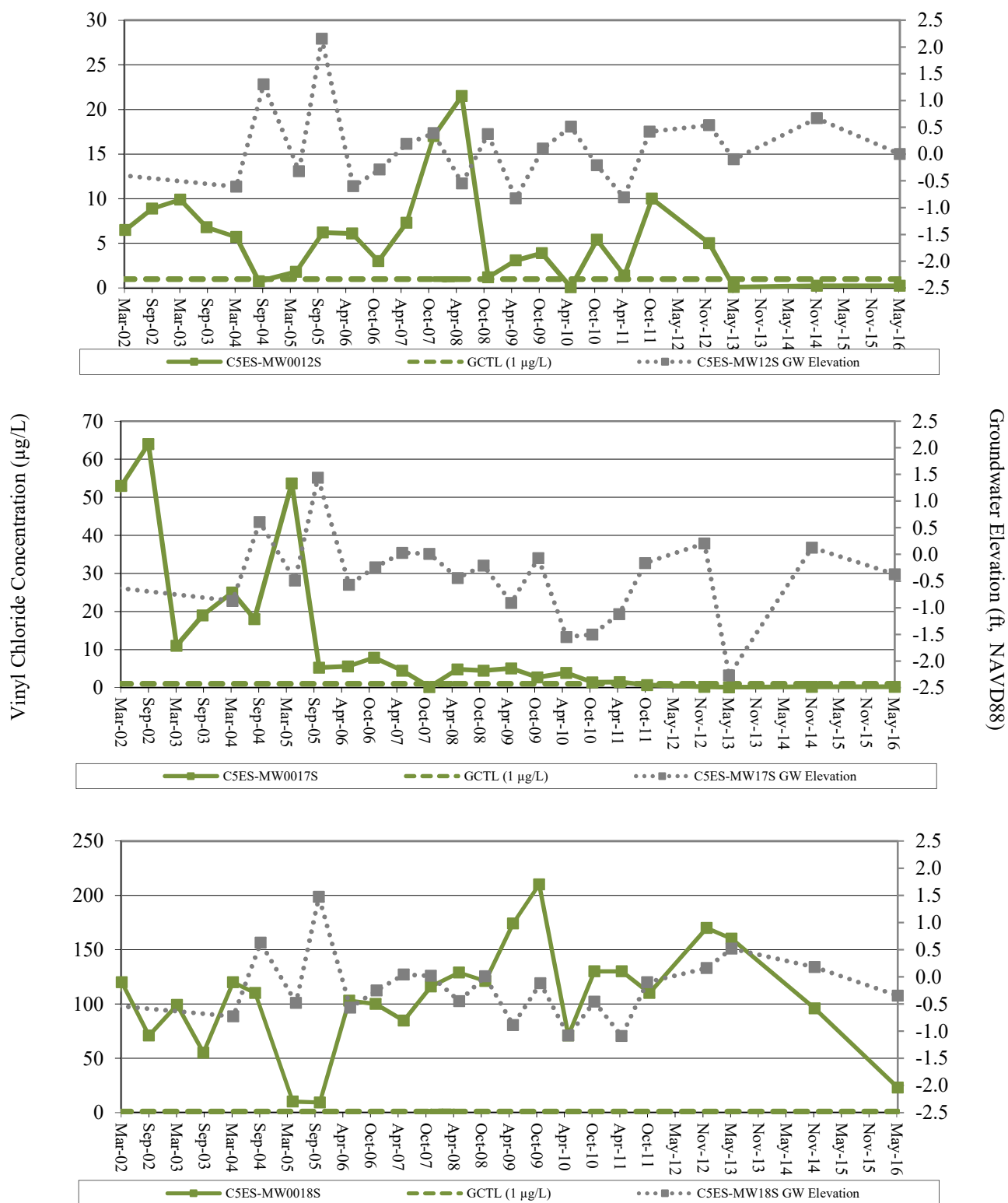
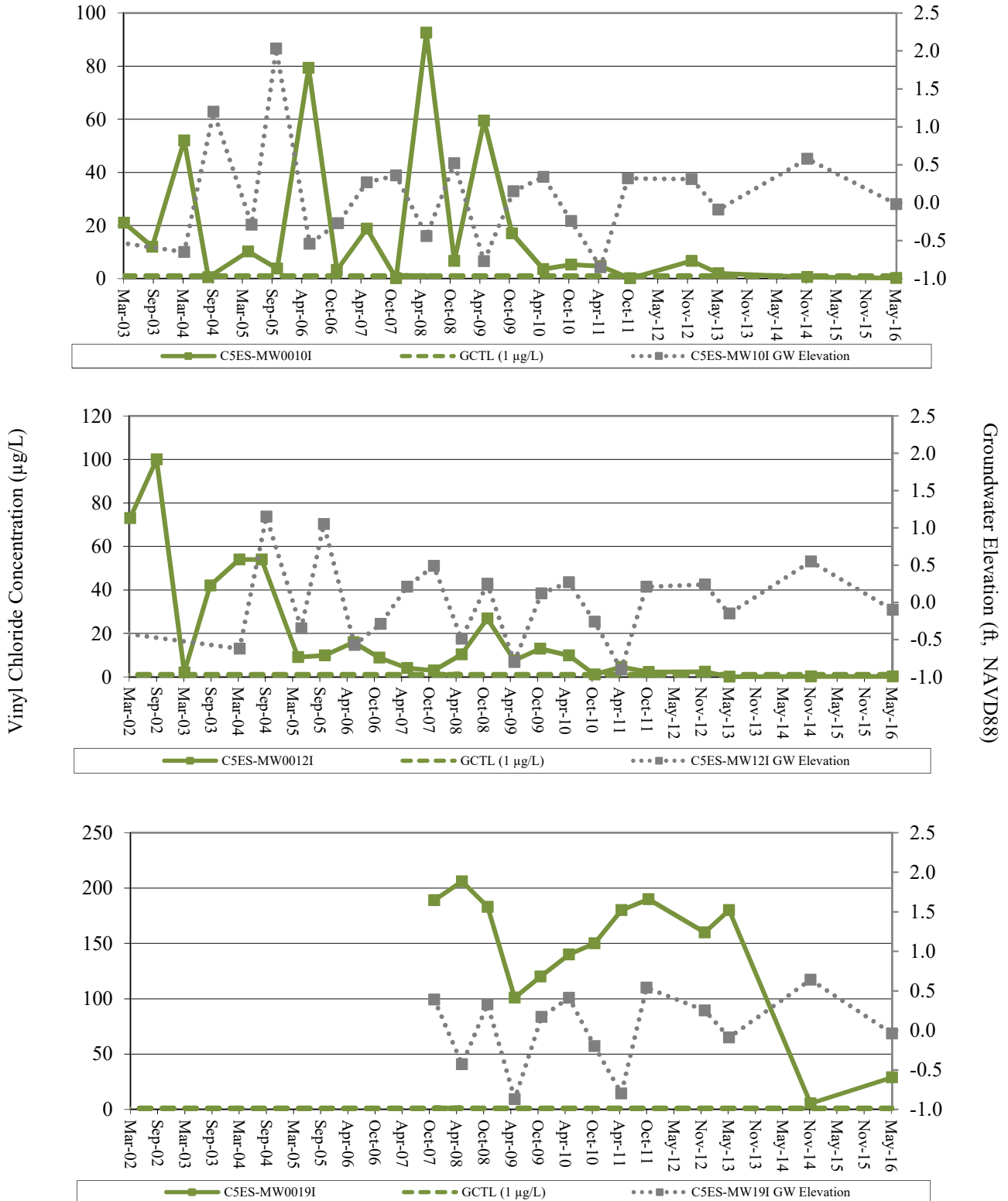
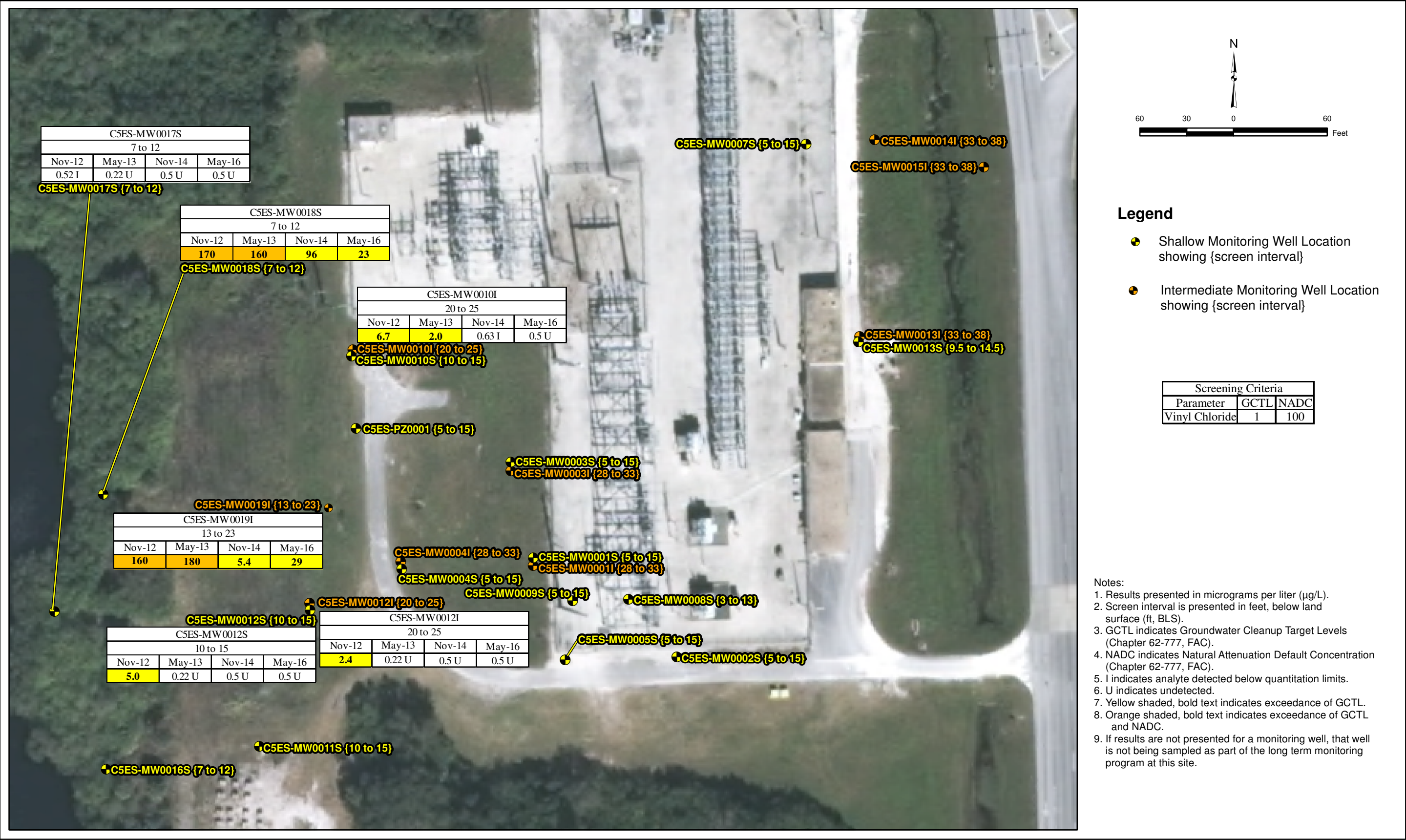
Figure 5-3. C5ES Hydrographs and Trend Plot of Vinyl Chloride in Shallow Wells

Figure 5-4. C5ES Hydrographs and Trend Plot of Vinyl Chloride in Intermediate Wells





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Figure 5-5
C5ES Summary of Vinyl Chloride Results
5-17/5-18

SECTION VI

SHUTTLE FLIGHT OPERATIONS CONTRACT GENERATOR MAINTENANCE FACILITY AREA (SWMU 81) RESULTS

6.1 WATER LEVELS AND GROUNDWATER FLOW DIRECTION

Groundwater levels in the SFOC Area were collected on 24 May 2016 and are summarized in Table 6-1. In addition, select historical data of depth to groundwater and groundwater elevation data are summarized in this table. Water levels recorded in the shallow zone in May 2016 indicate that groundwater flow is generally toward the northwest (Figure 6-1). The groundwater flow directions observed during 2016 were generally consistent with previously observed groundwater flow.

A hydrograph for the shallow zone is presented as Figure 6-2. The hydrographs indicate that there was a slight decrease in groundwater elevations measured in shallow monitoring wells. The hydrograph appears to indicate a seasonal pattern with higher groundwater elevations in the fall compared to elevations in the spring until May 2010. Groundwater elevations since May 2010 do not appear to exhibit a pattern, nor do they appear to be seasonally influenced.

6.2 FIELD MEASUREMENT RESULTS

Temperature, pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), total dissolved solids (TDS), and turbidity were measured and recorded in the field during purging prior to monitoring well sampling during the 2016 LTM event. A summary of water quality parameters recorded is provided in Table 6-2.

6.3 LABORATORY ANALYTICAL RESULTS

A summary of the historical and current analytical results (2007 to the present) for the wells sampled as, part of this LTM plan, are presented in Table 6-3. The table has been constructed to include the results associated with the contaminant of concern for this facility, namely antimony. A summary of the 2016 antimony analytical results in addition to antimony results from May 2007 to the present are provided on Figure 6-3. Groundwater samples were collected from two SFOC site monitoring wells during the 2016 LTM event; SFOC-IW0001S and SFOC-IW0004S. Laboratory analytical reports are presented in Appendix C.

In 2016, the antimony concentration observed in SFOC-IW0001S was 21 µg/L, above the GCTL of

6 µg/L. Antimony in SFOC-IW0001S has decreased since the November 2012 sampling event (from 148 µg/L to 21 µg/L). There appears to be a correlation between groundwater elevation and antimony concentration in SFOC-IW004S, indicating antimony may be present in the smear zone. Antimony in downgradient well SFOC-IW004S remains below laboratory method detection limits. Further evaluation of the area adjacent to SFOC-IW0001S by installing a new monitoring well with a screen interval greater than SFOC-IW0001S can be used to evaluate if the results from SFOC-IW0001S are more representative of the surficial aquifer conditions.

6.4 TREND ANALYSIS

Review of historical and current data for this facility indicates that antimony is the constituent of concern. A time trend plot of antimony concentrations detected in well SFOC-IW0001S is provided as Figure 6-2. Overall, there is no observed trend in antimony concentrations in SFOC-IW0001S.

Table 6-1. SFOC Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft NAVD88)	05/20/10		11/8/10		05/09/11		11/01/11		11/27/12		05/29/13		11/19/14		05/24/16	
			Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
Shallow Wells																		
SFOC-IW0001S	2 to 12	6.92	3.67	3.25	6.18	0.74	6.10	0.82	2.8	4.12	5.31	1.61	4.40	2.52	4.15	2.77	5.01	1.91
SFOC-IW0002S	2 to 12	5.65	2.22	3.43	4.51	1.14	4.62	1.03	NM		3.83	1.82	2.92	2.73	2.46	3.19	3.51	2.14
SFOC-IW0003S	2 to 12	4.88	1.65	3.23	3.92	0.96	4.09	0.79	NM		3.11	1.77	2.15	2.73	2.05	2.83	2.90	1.98
SFOC-IW0004S	2 to 12	5.10	1.78	3.32	4.17	0.93	4.37	0.73	1.01	4.09	3.43	1.67	2.51	2.59	2.25	2.85	3.18	1.92
SFOC-IW0005S	2 to 12	3.76	0.87	2.89	2.98	0.78	3.13	0.63	0.00	3.76	2.34	1.42	1.42	2.34	1.15	2.61	2.11	1.65
SFOC-IW0006S	5 to 15	6.56	3.11	3.45	5.58	0.98	5.59	0.97	NM		4.71	1.85	3.93	2.63	3.75	2.81	4.45	2.11

- Notes:
1. BLS = Below Land Surface.
 2. BTOC = Below Top of Casing.
 3. ft = feet.
 4. NAVD88 = North American Vertical Datum 1988.
 5. NM = Not Measured.
 6. TOC = Top of Casing.

Table 6-2. SFOC Groundwater Quality Parameters

Well ID	Screened Interval (ft BLS)	Date	Temperature (°C)	pH (S.U.)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Total Dissolved Solids (g/L)	Turbidity (NTU)	Color
SFOC-IW0001S	2 to 12	11/21/14	25.00	5.50	0.13	1.29	30.20	0.08	6.13	clear
		5/24/16	25.40	5.91	0.28	0.35	-21.70	0.18	6.27	clear
SFOC-IW0004S	2 to 12	11/21/14	26.00	6.01	0.20	1.20	47.90	0.14	11.90	clear
		5/24/16	24.46	5.36	0.17	0.12	-61.1	0.11	13.8	clear

Notes:

1. ft BLS = feet below land surface.
2. °C = degrees Celsius.
3. S.U. = Standard Units.
4. mS/cm = milliSiemens per centimeter.
5. mg/L = milligram per liter.
6. mV = millivolts.
7. g/L = gram per liter.
8. NTU = Nephelometric Turbidity Units.

Table 6-3. SFOC Summary of Historical Groundwater Data

Well ID:		SFOC-IW0001S									
Screened Interval (ft BLS):		2 to 12									
Sample Date:		May-07	Jan-08	Nov-08	May-09	Nov-10	May-11	Nov-12	May-13	Nov-14	May-16
Screening Criteria											
GCTL NADC											
Metals (µg/L)											
Antimony	6 60	3.4 U	74.0	49.7	7.0	26	67	148	82	78	21

Well ID:		SFOC-IW0004S									
Screened Interval (ft BLS):		2 to 12									
Sample Date:		May-07	Nov-07	Nov-08	May-09	Nov-10	May-11	Nov-12	May-13	Nov-14	May-16
Screening Criteria											
GCTL NADC											
Metals (µg/L)											
Antimony	6 60	3.4 U	NA	5.3 I	4.5 U	0.8 I	0.7 I	0.120 U	0.180 I	0.84 U	0.85 U

Notes:

1. ft BLS = feet Below Land Surface.
2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
4. µg/L = micrograms per liter.
5. Yellow shaded, bold text indicates exceedance of GCTL.
6. Orange shaded, bold text indicates exceedance of GCTL and NADC.
7. U = Undetected.
8. NA = Not Analyzed.
9. I = analyte detected below quantitation limits.

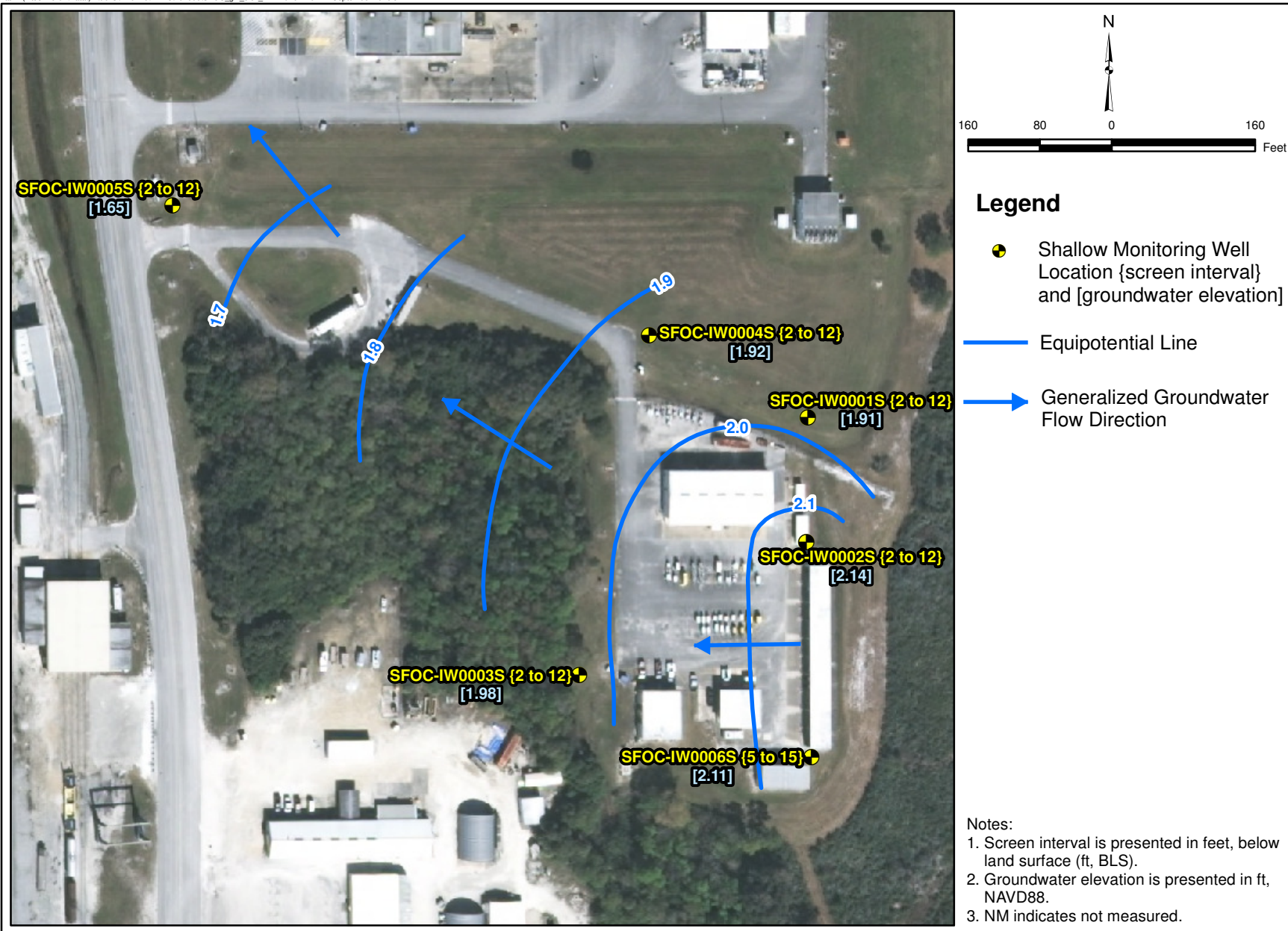
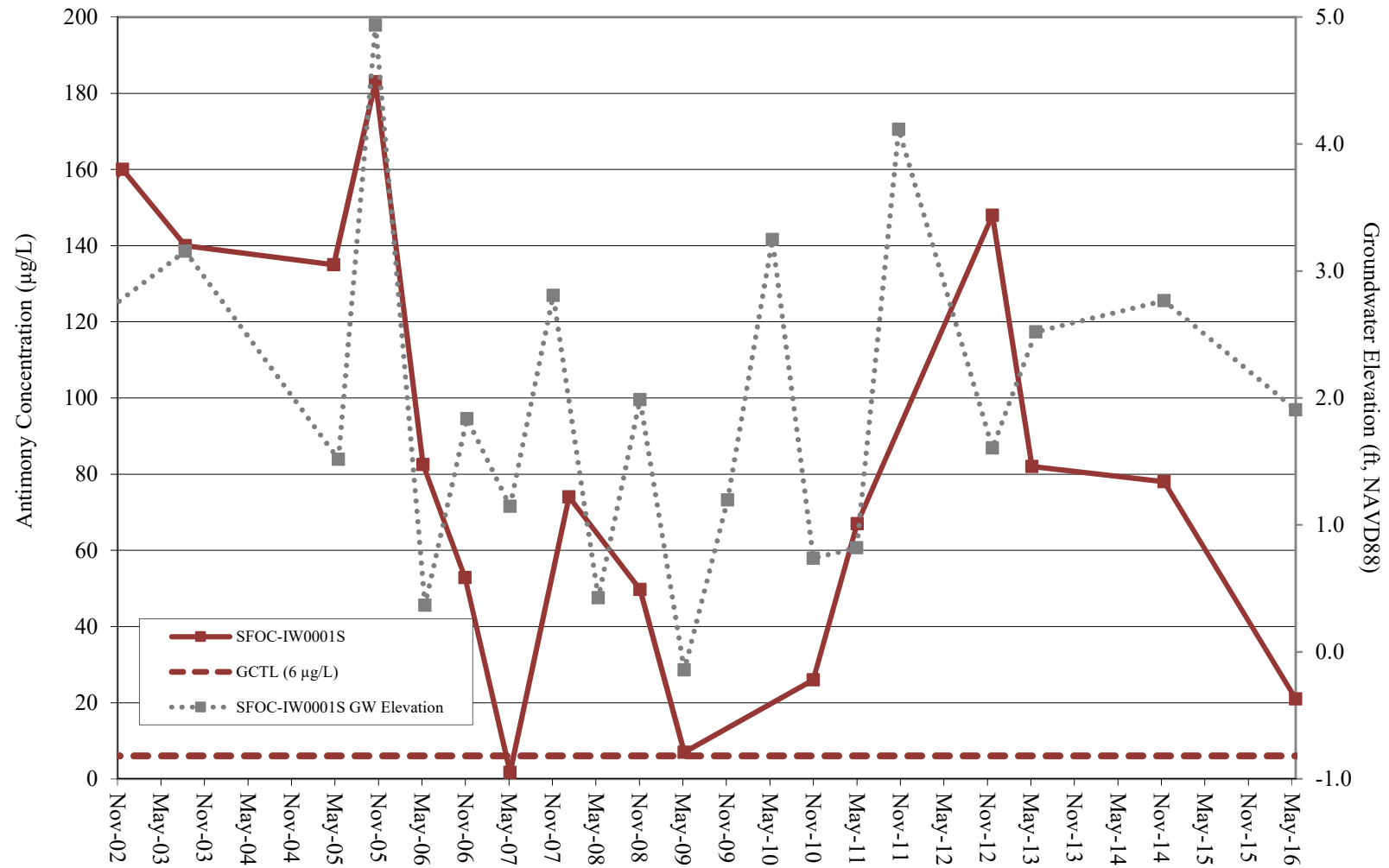


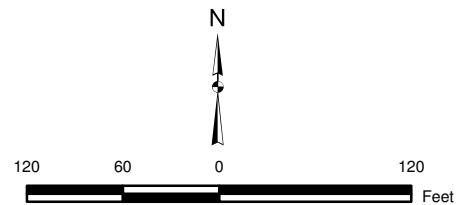
Figure 6-1

SFOC Shallow Zone Potentiometric Surface Map – May 2016

Figure 6-2
SFOC Hydrograph and Trend Plot of Antimony



November 2016



Legend

- Shallow Monitoring Well Location {screen interval}

Screening Criteria		
Parameter	GCTL	NADC
Antimony	6	60

Notes:

1. Screen interval is presented in feet, below land surface (ft, BLS).
2. Results are presented in $\mu\text{g/L}$.
3. I indicates analyte detected below quantitation limits.
4. U indicates undetected.
5. GCTL indicates Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
6. NADC indicates Natural Attenuation Default Concentration (Chapter 62-777, FAC).
7. Yellow shaded, bold text indicates exceedance of GCTL.
8. Orange shaded, bold text indicates exceedance of GCTL and NADC.
9. If results are not presented for a monitoring well, that well is not being sampled as part of the long term monitoring program at this site.

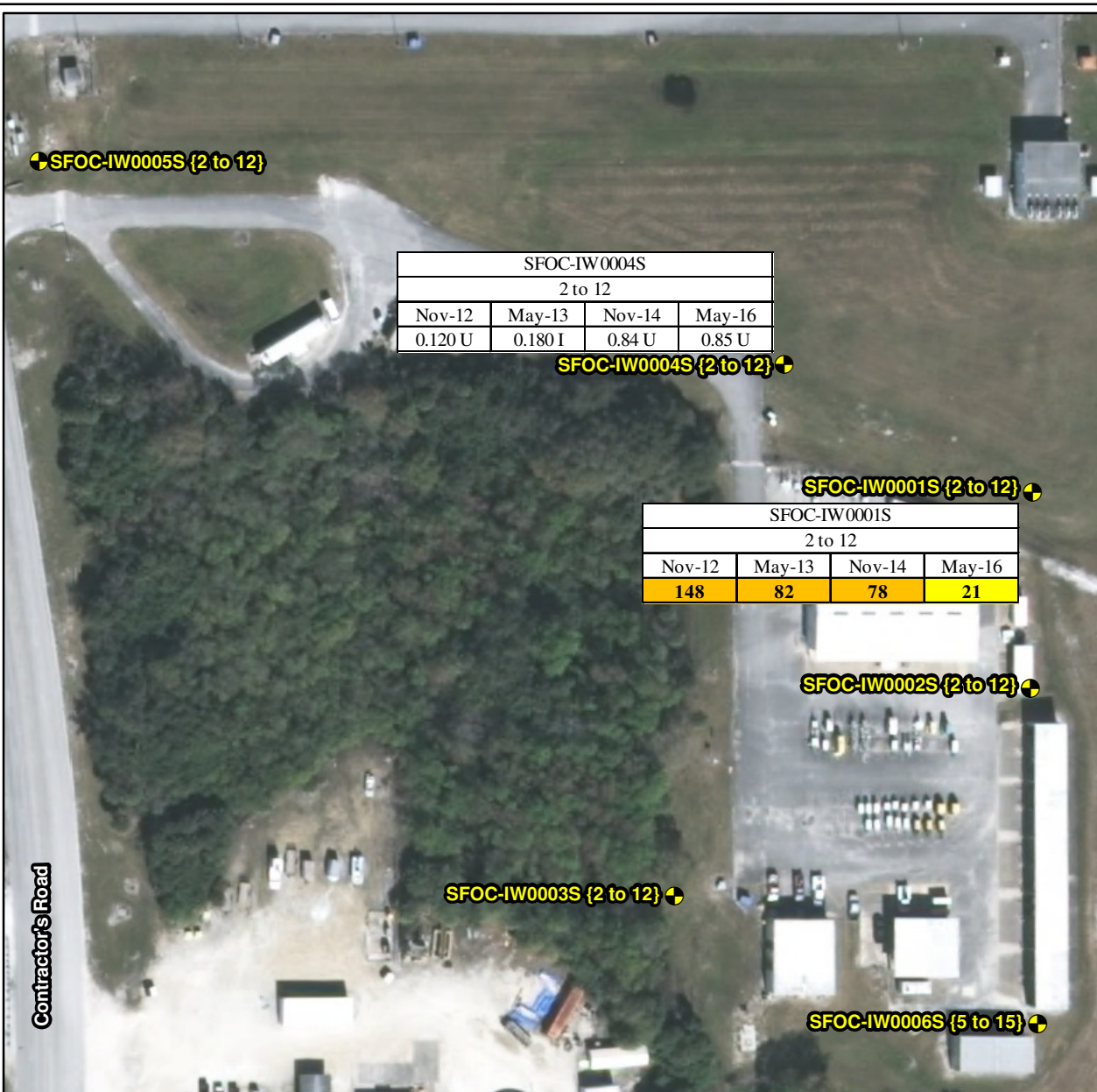


Figure 6-3
SFOC Summary of Antimony Results

6-11/6-12

SECTION VII

VEHICLE ASSEMBLY BUILDING AREA (SWMUS 40, 44, 56, 72, 74, 80, 83, 101, and 108) RESULTS

7.1 WATER LEVELS AND GROUNDWATER FLOW DIRECTION

Groundwater levels were recorded in the VAB Area on 23 May 2016 and are summarized in Table 7-1. In addition, select historical data of depth to groundwater and groundwater elevation data is summarized in this table. The hydrographs indicate that there was a slight decrease in groundwater elevations measured in shallow and intermediate monitoring wells. In general, in each zone, a radial groundwater flow pattern was inferred, with groundwater flow to the north-northwest in the northern portion of the site and generally to the southeast south of the VAB (Figures 7-1 through 7-3).

Hydrographs for the shallow, intermediate, and deep zones are presented as Figures 7-4 through 7-9, respectively. Generally, the hydrographs are similar in that they appear to show seasonal patterns with higher groundwater elevations in the fall than in the spring until May 2009. Groundwater elevations since May 2009 do not appear to exhibit a pattern, nor do they appear to be seasonally influenced. On average, groundwater levels decreased by approximately 0.15 foot between spring 2016 and fall 2014.

7.2 FIELD MEASUREMENT RESULTS

Temperature, pH, conductivity, DO, ORP, TDS, and turbidity were measured and recorded in the field during purging prior to monitoring well sampling during the 2016 LTM event. For the two wells (MLPV-SAMW0001 and MLPV-SAMW0003) sampled utilizing low flow purging techniques, a summary of the water quality parameters recorded is provided in Table 7-2.

7.3 LABORATORY ANALYTICAL RESULTS

A summary of the historical and current analytical results (May 2007 to the present) for the wells sampled as part of this LTM plan are presented in Table 7-3. This table includes all historical and current results associated with the contaminants of concern for this facility, namely VOCs. A summary of available VC results for the past five years in the shallow, intermediate, and deep zones are provided as Figures 7-10, 7-11, and 7-12, respectively. Laboratory analytical reports are presented in Appendix C.

7.3.1 VOCS IN SHALLOW WELLS.

The 2016 analytical results revealed an exceedance of the VC GCTL in WCPS-IW0001SR (28 µg/L). No VOC exceedance was noted in the groundwater sample collected from PCCA-MW0004 for this sampling event.

7.3.2 VOCS IN INTERMEDIATE WELLS.

In 2016, the VC GCTL was exceeded in three of 13 sampled intermediate monitoring wells: MLPV-IW0028I, MLPV-IW0046, and MLPV-IW0053. The VC concentrations in MLPV-IW0028I, MLPV-IW0046, and MLPV-IW0053 were 4 µg/L, 8.1 µg/L, and 52 µg/L, respectively. No other VOC exceedances were noted in groundwater samples collected from intermediate wells for this sampling event.

7.3.3 VOCS IN DEEP WELLS.

In 2016, the VC GCTL was exceeded in three of the 15 sampled deep monitoring wells: MLPV-IW0029D, MLPV-IW0052, and MLPV-SAMW0003. VC concentrations detected above the GCTL ranged from 27 µg/L to 80 µg/L. No other GCTL or NADC exceedances were noted in groundwater samples collected from deep wells for this sampling event. These VC concentrations were generally consistent with historic concentrations observed at each well.

7.3.4 TREND ANALYSIS

Review of historical and current data for this facility indicates that trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and VC have been the primary constituents of concern. However, TCE, cDCE, and tDCE have not been detected in currently monitored wells at concentrations exceeding their respective GCTLs since November 2006 in VAB Area wells. A statistical analysis of the VC results for the VAB Area wells was conducted using the MAROS software package. Wells with results from at least five sampling events were included in the analysis. A summary of the software output is included in Appendix D. There are no increasing trends in the VAB Area wells. The VC concentration trend output for the wells evaluated was as follows:

- Shallow Zone: no trend observed in WCPS-IW0001SR, and probably decreasing trend in PCCA-MW0004.

- Intermediate Zone: decreasing trends in all seven monitoring wells (SATV-IW0009I, PRES-IW0007I, MLPV-IW0009I, MLPVIW0028I, MLPV-IW0006IR MLPV-IW0012I, and PCCA-MW0017).

Deep Zone: decreasing trends in four monitoring wells (MLPV-IW0009D, MLPV-IW0012D, MLPV-IW0029D, and MLPV-SAMW3) and no trend in two monitoring wells (MLPV-IW0018D and MLPV-SAMW3).

7.4 FORMER SOURCE AREA INTERIM GROUNDWATER MONITORING

Enhanced bioremediation of the source area was implemented from August 2006 until March 2009 using ethyl lactate as an electron donor. Enhanced bioremediation activities were completed in 2009 because the Corrective Action Objective was achieved (chlorinated VOC concentrations less than NADC). The former source area entered into interim groundwater monitoring (IGM; previously referred to as interim long-term monitoring) in 2009 with TCE, cDCE and tDCE concentrations below their respective GCTLs (with the exception of 5.2 µg/L TCE in the groundwater sample collected from monitoring well SAMW0001); therefore, the goal was to reduce VC concentrations in the former source area below the GCTL. After seven years of IGM, no rebound of CVOCs has been observed in the former source area monitoring wells. Results from the IGM sampling suggest that the remaining VC concentrations are generally stable, and two monitoring wells, SAMW0001 and SAMW003 were transferred to the LTM program. Results from the IGM sampling were included in the 2015 *Corrective Measures Implementation and Interim Measures Annual Report: Summary of Biosparge and Air Sparge System Operation and Maintenance* [NASA 2015].

7.5 AIR SPARGE SYSTEM

An air sparge system, designed to treat the area where TCE concentrations are greater than 300 µg/L and cDCE concentrations are greater than 7,000 µg/L, was installed in the area northeast of the former source area from June to August 2012. Between September 2012 to July 2015, the overall CVOC mass reduction is approximately 97%. Details of the air sparge system operation are included in the 2015 *Corrective Measures Implementation and Interim Measures Annual Report: Summary of Biosparge and Air Sparge System Operation and Maintenance* [NASA 2015].

Table 7-1. VAB Area Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft NAVD88)	05/19/10		11/10/10		05/09/11		11/01/11		11/27/12		05/28/13		11/19/14		05/23/16	
			Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)
Shallow Wells																		
MLPV-IW0001S	2 to 12	4.78	3.72	1.06	4.46	0.32	5.15	-0.37	3.00	1.78	4.21	0.57	3.51	1.27	3.70	1.08	3.63	1.15
VABU-IW0004S	3 to 13	6.52	3.87	2.65	4.74	1.78	4.94	1.58	3.90	2.62	4.17	2.35	4.13	2.39	4.03	2.49	4.24	2.28
OPF3-IW0006S	10 to 20	5.44	3.79	1.65	6.5	-1.06	5.14	0.30	3.10	2.34	4.37	1.07	3.76	1.68	3.75	1.69	4.3*	1.14
PRES-IW0001S	6 to 16	7.93	6.59	1.34	7.49	0.44	7.76	0.17	5.78	2.15	NM		6.55	1.38	6.37	1.56	6.82*	1.11
PRES-IW0006S	3 to 13	4.04	4.24	-0.20	6.55	-2.51	5.69	-1.65	5.42	-1.38	6.17	-2.13	4.45	-0.41	4.21	-0.17	NM	
PRES-IW0007S	1 to 11	1.65	1.93	-0.28	2.71	-1.06	3.63	-1.98	1.73	-0.08	NM		2.14	-0.49	1.91	-0.26	NM	
PCCA-MW0004	5 to 15	7.96	4.87	3.09	5.72	2.24	5.98	1.98	4.26	3.70	5.57	2.39	4.91	3.05	4.75	3.21	5.23	2.73
PCCA-MW0007	5 to 15	8.22	5.18	3.04	6.01	2.21	6.35	1.87	4.66	3.56	5.94	2.28	5.05	3.17	5.07	3.15	5.56	2.66
PCCA-MW0008	5 to 15	7.22	3.99	3.23	4.7	2.52	4.93	2.29	3.26	3.96	4.44	2.78	4.78	2.44	3.58	3.64	4.22	3.00
PCCA-MW0009	5 to 15	7.60	4.3	3.30	5.11	2.49	5.26	2.34	3.67	3.93	4.85	2.75	4.24	3.36	4.02	3.58	4.72	2.88
PCCA-MW0010	5 to 15	7.86	4.46	3.40	4.21	3.65	5.42	2.44	3.74	4.12	5.03	2.83	4.43	3.43	4.27	3.59	4.74	3.12
PCCA-MW0011	5 to 15	7.59	4.19	3.40	4.92	2.67	5.24	2.35	3.39	4.20	7.02	0.57	3.97	3.62	3.94	3.65	4.54	3.05
PCCA-MW0012	5 to 15	7.89	4.37	3.52	5.15	2.74	5.32	2.57	3.59	4.30	4.98	2.91	4.22	3.67	4.09	3.80	4.73	3.16
PCCA-MW0013	5 to 15	6.99	2.89	4.10	4.02	2.97	4.19	2.80	2.23	4.76	3.88	3.11	3.12	3.87	2.71	4.28	3.46	3.53
PCCA-MW0014	5 to 15	7.25	4.12	3.13	4.79	2.46	5.15	2.10	3.22	4.03	4.70	2.55	4.98	2.27	3.84	3.41	4.42	2.83
WCPS-IW0001SR	2.5 to 12.5	4.23	3.06	1.17	3.65	0.58	4.10	0.13	2.27	1.96	3.13	1.10	2.80	1.43	2.56	1.67	3.02	1.21
WCPS-IW0002SR	2.5 to 12.5	5.39	4.21	1.18	4.81	0.58	5.18	0.21	3.28	2.11	4.37	1.02	3.37	2.02	NM		NM	
WCPS-IW0005S	2 to 12	4.48	3.38	1.10	4.1	0.38	4.61	-0.13	2.84	1.64	3.72	0.76	3.40	1.08	3.05	1.43	3.45	1.03
WCPS-IW0006S	3 to 13	4.88	3.92	0.96	4.5	0.38	4.88	0.00	2.95	1.93	3.93	0.95	3.61	1.27	3.45	1.43	3.81	1.07
WCPS-IW0009S	2.5 to 12.5	5.30	3.84	1.46	4.64	0.66	5.06	0.24	3.06	2.24	4.19	1.11	3.88	1.42	3.63	1.67	4.02	1.28
WCPS-IW0010S	2.5 to 12.5	5.83	4.4	1.43	5.19	0.64	5.59	0.24	3.53	2.30	4.70	1.13	4.19	1.64	4.11	1.72	NM	
WCPS-IW0012S	2 to 12	4.77	3.07	1.70	4.06	0.71	4.53	0.24	2.33	2.44	NM		NM		NM		NM	
WCPS-IW0013S	2.5 to 12.5	5.79	3.8	1.63	4.61	0.82	5.04	0.39	NM		4.26	1.17	NM		3.70	2.09	4.12	1.67
WCPS-IW0014S	4 to 14	6.88	5.16	1.72	5.98	0.90	6.37	0.51	4.25	2.63	5.63	1.25	4.98	1.90	4.92	1.96	5.36	1.52
WCPS-IW0015S	3 to 13	5.63	4.59	1.04	5.31	0.32	5.72	-0.09	4.23	1.40	4.83	0.80	4.71	0.92	4.56	1.07	4.90	0.73
Intermediate Wells																		
MLPV-IW0002I	28 to 33	5.58	4.67	0.91	5.52	0.06	5.99	-0.41	3.98	1.60	5.00	0.58	NM		NM		NM	
MLPV-IW0006IR	28 to 33	2.87	2.82	0.05	2.86	0.01	3.50	-0.63	1.45	1.42	NM		3.84	-0.97	2.21	0.66	2.15	0.72
MLPV-IW0009I	28 to 33	5.78	4.38	1.40	5.49	0.29	5.94	-0.16	3.66	2.12	4.98	0.80	4.37	1.41	3.98	1.80	4.65	1.13
MLPV-IW0011I	35 to 40	4.03	2.2	1.83	3.53	0.50	3.90	0.13	1.48	2.55	2.99	1.04	2.32	1.71	1.21	2.82	2.65	1.38
MLPV-IW0012I	35 to 40	5.41	3.43	1.98	4.74	0.67	5.15	0.26	2.72	2.69	4.26	1.15	3.58	1.83	2.80	2.61	3.90	1.51
MLPV-IW0014I	35 to 40	5.24	3.15	2.09	4.42	0.82	4.73	0.51	2.39	2.85	NM		3.21	2.03	2.71	2.53	3.60	1.64
MLPV-IW0017I	35 to 40	5.85	3.97	1.88	5.32	0.53	5.69	0.16	3.25	2.60	4.82	1.03	4.16	1.69	3.45	2.40	4.45	1.40
MLPV-IW0027I	28 to 33	2.08	0.80	1.28	2.01	0.07	2.51	-0.43	0.64	1.44	1.53	0.55	0.96	1.12	1.43	0.65	1.50	0.58
MLPV-IW0028I	28 to 33	2.08	1.90	0.18	2.68	-0.60	3.16	-1.08	1.37	0.71	2.21	-0.13	1.72	0.36	1.71	0.37	2.06	0.02
MLPV-IW0046	35 to 45	2.70	NM		NM		NM		NM		NM		NM		1.71	0.99	2.07	0.63
MLPV-IW0047	35 to 45	5.87	NM		NM		NM		NM		NM		NM		3.19	2.68	4.80	1.07
MLPV-IW0053	35 to 45	4.76	NM		NM		NM		NM		NM		NM		2.93	1.83	3.60	1.16
MLPV-IW0056	30 to 40	7.90	NM		NM		NM		NM		NM		NM		5.77	2.13	6.09	1.81
PCCA-MW0015	15 to 25	8.11	5.12	2.99	6.03	2.08	6.34	1.77	4.55	3.56	5.84	2.27	5.24	2.87	5.00	3.11	5.55	2.56
PCCA-MW0016	15 to 25	7.33	4.17	3.16	5.12	2.21	5.49	1.84	3.62	3.71	4.89	2.44	4.27	3.06	4.10	3.23	4.62	2.71
PCCA-MW0017	15 to 25	7.59	4.35	3.24	5.34	2.25	5.68	1.91	3.78	3.81	5.16	2.43	4.48	3.11	4.30	3.29	4.82	2.77
PCCA-MW0018	15 to 25	7.55	4.33	3.22	5.31	2.24	5.66	1.89	3.71	3.84	5.04	2.51	4.47	3.08	4.30	3.25	4.80	2.75
PCCA-MW0019	15 to 25	7.01	3.68	3.33	4.71	2.30	5.05	1.96	3.14	3.87	4.45	2.56	3.91	3.10	3.66	3.35	4.18	2.83
PCCA-MW0020	25 to 35	7.38	4.19	3.19	5.18	2.20	5.50	1.88	3.68	3.70	4.96	2.42	4.35	3.03	4.10	3.28	4.62	2.76
WCPS-IW0016	15 to 25	4.57	NM		NM		NM		NM		NM		NM		3.15	1.42	2.52	2.05

Notes:

1. ft = feet.
2. BLS = Below Land Surface.
3. TOC = Top of Casing.
4. NAVD88 = North American Vertical Datum 1988.
5. BTOC = Below Top of Casing.
6. NM = Not Measured.
7. * = collected outside the 24 hour period as construction in the VAB impeded access.

Table 7-1. VAB Area Groundwater Elevations

Well ID	Screened Interval (ft BLS)	TOC Elevation (ft NAVD88)	05/19/10		11/10/10		05/09/11		11/01/11		11/27/12		05/28/13		11/19/14		05/23/16	
			Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAVD88)	Depth to Water (ft BTOC)	Water Elevation (ft NAV88)	Depth to Water (ft BTOC)	Water Elevation (ft NAV88)
Intermediate Wells																		
PRES-IW0007I	32 to 37	4.62	3.49	1.13	4.30	0.32	4.84	-0.22	3.28	1.34	4.09	0.53	3.70	0.92	3.55	1.07	3.78	0.84
PRES-IW0008I	38 to 42	6.18	4.80	1.38	5.68	0.50	6.09	0.09	4.52	1.66	5.37	0.81	4.95	1.23	4.86	1.32	NM	
SATV-IW0009I	22 to 27	6.93	4.85	2.08	6.90	0.03	6.21	0.72	4.28	2.65	5.63	1.30	4.84	2.09	4.89	2.04	5.25	1.68
SATV-IW0010	35 to 45	6.85	NM		NM		NM		NM		NM		NM		4.87	1.98	5.25	1.60
TPF-MW0001	23 to 28	7.62	5.99	1.63	6.87	0.75	7.30	0.32	5.22	2.40	6.49	1.13	5.99	1.63	5.77	1.85	6.20	1.42
Deep Wells																		
MLPV-IW0001D	50 to 55	4.51	3.45	1.06	4.37	0.14	4.91	-0.40	3.00	1.51	3.87	0.64	3.42	1.09	3.71	0.80	3.85	0.66
MLPV-IW0009D	45 to 50	5.77	4.42	1.35	5.51	0.26	5.91	-0.14	3.68	2.09	4.95	0.82	4.35	1.42	4.08	1.69	4.61	1.16
MLPV-IW0012D	45 to 50	5.40	3.43	1.97	4.68	0.72	5.10	0.30	2.69	2.71	4.19	1.21	3.53	1.87	3.13	2.27	3.85	1.55
MLPV-IW0018D	50 to 55	8.78	6.63	2.15	8.02	0.76	8.23	0.55	5.91	2.87	7.41	1.37	6.73	2.05	6.71	2.07	7.25	1.53
MLPV-IW0022D	48 to 53	8.26	6.11	2.15	8.02	0.24	7.45	0.81	5.42	2.84	6.80	1.46	6.11	2.15	6.09	2.17	6.48	1.78
MLPV-IW0027D	45 to 50	1.99	0.85	1.14	2.02	-0.03	2.48	-0.49	0.63	1.36	1.46	0.53	1.07	0.92	1.20	0.79	1.48	0.51
MLPV-IW0028D	45 to 50	3.03	2.26	0.77	3.11	-0.08	3.59	-0.56	1.67	1.36	1.99	1.04	2.06	0.97	1.98	1.05	2.38	0.65
MLPV-IW0029D	42 to 47	6.84	4.66	2.18	5.88	0.96	6.19	0.65	3.88	2.96	5.46	1.38	4.70	2.14	4.47	2.37	5.06	1.78
MLPV-IW0048	40 to 50	4.23	NM		NM		NM		NM		NM		NM		2.59	1.64	2.91	1.32
MLPV-IW0049	38 to 48	8.11	NM		NM		NM		NM		NM		NM		5.90	2.21	6.25	1.86
MLPV-IW0050	40 to 50	7.15	NM		NM		NM		NM		NM		NM		5.20	1.95	5.50	1.65
MLPV-IW0051	45 to 55	6.12	NM		NM		NM		NM		NM		NM		4.65	1.47	4.65	1.47
MLPV-IW0052	40 to 50	7.09	NM		NM		NM		NM		NM		NM		4.69	2.40	5.38	1.71
MLPV-IW0054	40 to 50	6.96	NM		NM		NM		NM		NM		NM		4.98	1.98	5.35	1.61
MLPV-IW0055	40 to 50	7.60	NM		NM		NM		NM		NM		NM		4.75	2.85	5.84	1.76
MLPV-SAMW0001	43 to 48	6.80	NM		NM		NM		NM		NM		NM		NM		3.48	3.32
MLPV-SAMW0003	43 to 48	6.80	NM		NM		NM		NM		NM		NM		NM		4.03	2.77
VABU-IW0006D	42 to 47	6.29	4.48	1.81	5.52	0.77	5.82	0.47	3.88	2.41	5.11	1.18	4.59	1.70	4.47	1.82	4.84	1.45
PRES-IW0002D	42 to 47	5.11	4.13	0.98	5	0.11	5.55	-0.44	3.92	1.19	NM		4.36	0.75	4.15	0.96	NM	
PRES-IW0007D	42 to 47	4.63	3.53	1.10	4.38	0.25	4.90	-0.27	3.34	1.29	3.97	0.66	3.74	0.89	3.60	1.03	3.84	0.79
PRES-IW0009	40 to 50	5.17	NM		NM		NM		NM		NM		NM		3.70	1.47	3.97	1.20
PRES-IW0010	40 to 50	2.26	NM		NM		NM		NM		NM		NM		1.16	1.10	1.3	0.96
SATV-IW0003D	40 to 45	7.10	5.15	1.95	6.13	0.97	6.45	0.65	4.60	2.50	5.90	1.20	5.22	1.88	4.47	2.63	5.51	1.59

- Notes:
1. ft = feet.
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 5. BTOC = Below Top of Casing.
 6. NM = Not Measured.
 7. * = collected outside the 24 hour period as construction in the VAB impeded access.

Table 7-2. VAB Area Groundwater Quality Parameters

Well ID	Screened Interval (ft BLS)	Date	Temperature (°C)	pH (S.U.)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Total Dissolved Solids (g/L)	Turbidity (NTU)	Color
MLPV-SAMW0001	43 to 48	5/24/16	26.62	6.06	9.09	0.12	-177.30	5.904	16.4	clear
MLPV-SAMW0003	42 to 48	5/24/16	26.89	6.83	6.64	0.08	-212.9	4.311	9.04	clear

Notes:

1. ft BLS = feet below land surface.
2. °C = degrees Celsius.
3. S.U. = Standard Units.
4. mS/cm = milliSiemens per centimeter.
5. mg/L = milligram per liter.
6. mV = millivolts.
7. g/L = gram per liter.
8. NTU = Nephelometric Turbidity Units.

Table 7-3. VAB Area Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW00061R 28 to 33													
			Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	
VOCs (µg/L)																
Trichloroethene	3	300	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U,J	0.50 U	0.50 U	
cis-1,2-Dichloroethene	70	700	0.28 U	2.8	0.2 U	1.5	0.67 I	0.083 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U,J	0.50 U	0.50 U	
trans-1,2-Dichloroethene	100	1000	0.20 U	0.48 I	0.45 U	0.45 U	0.13 U	0.39 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U,J	0.50 U	0.50 U	
1,1-Dichloroethene	7	700	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13U	0.16 U	0.16 U	0.16 U,J	0.50 U	0.50 U	
Vinyl Chloride	1	100	9.5	32.1	8.9	23.3	9.8	4.1	3.2	4.7	2.0	1.1	0.76 I	0.99 I	0.50 U	

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0009I 28 to 33													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.60 I	0.71 I	0.2 U	0.27 I	0.2 U	0.12 U	0.083 U	NS	0.4 I	NS	0.41 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.59 I	0.48 I	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	NS	0.22 I	NS	0.16 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	4.8	5.0	4.4	3	2.8	2.3	1.8	NS	2.3	NS	1.7	1.6	2.1	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0009D 45 to 50													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	5.2	13.3	4.6	1.7	2.4	1.8	0.86 I	0.93 I	0.71 U	11	1.0	1.6	0.77 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.20 U	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	0.12 U	0.12 I	0.12 U	0.12 U	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	36.4	199	56.2	115	46.9	35	35	9.4	11	260	15	21	10	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0012I 35 to 40													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.57 I	0.47 I	0.72 I	0.38 I	0.62 I	0.12 U	0.32 I	NS	0.43 I	NS	0.43 I	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.20 U	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	NS	0.17 I	NS	0.12 U	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	7.3	9.1	11.1	10.4	12.3	7.3	4.9	NS	5	NS	2.6	0.22 U	0.50 U	0.50 U

- Notes:
1. ft BLS = feet Below Land Surface.
2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
4. µg/L = micrograms per liter.
5. U = Undetected.
6. J = estimated value below the reporting limit.
7. I = analyte detected below quantitation limits.
8. NS = Not Sampled.
9. Yellow shaded, bold text indicates exceedance of GCTL.
10. Orange shaded, bold text indicates exceedance of GCTL and NADC.

Table 7-3. VAB Area Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0012D 45 to 50													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.50 U	1.0	0.2 U	0.2 U	0.2 U	0.12 U	0.91 I	0.36 U	0.36 U	1.4	0.36 U	0.53 I	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.20 U	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	9.0	86.2	13.3	53.7	14.5	12	38	8.8	6.4	53	8.6	14	8.5	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0018D 50 to 55														
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	
VOCs (µg/L)																	
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U,J	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.53 I	5.1	1.1	2.6	0.85 I	0.66 I	1.4	0.78 I	0.78 I	4.6	0.93 I	1.7 J	0.76 I	0.50 U	
trans-1,2-Dichloroethene	100	1000	0.50 U	0.20 U	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	0.12 U	0.12 U	0.41 I	0.12 U	0.13 I	0.50 U	0.50 U	
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13 U	0.16 U	0.16 U	0.16 U,J	0.50 U	0.50 U	
Vinyl Chloride	1	100	0.50 U	7.4	0.71 I	4.6	0.92 I	0.82 I	2.6	0.74 I	0.64 I	32	4.8	12 J	2.5	0.50 U	

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0028I 28 to 33													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	2.0	0.28 U	2.9	1.3	1.5	0.39 I	0.45 I	NS	0.36 U	NS	0.36 U	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	1.0	0.20 U	0.84 I	0.77 I	0.79 I	0.13 U	0.39 U	NS	0.32 I	NS	0.25 I	0.19 I	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	18.9	24.1	28.8	25.6	22	16	16	NS	14	NS	11	9.0	10	4

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0029D 42 to 47													
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)																
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.69 I	0.53 I	0.2 U	1	0.86 I	0.61 I	0.083 U	NS	1.1	NS	1.2	0.36 U	0.77 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.36 I	0.45 U	0.53 I	0.45 U	0.13 U	0.39 U	NS	0.37 I	NS	0.32 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	34.2	38.2	59.4	54.8	55.1	43	33	NS	51	NS	42	33	43	27

- Notes:
1. ft BLS = feet Below Land Surface.
2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).
4. µg/L = micrograms per liter.
5. U = Undetected.
6. J = estimated value below the reporting limit.
7. I = analyte detected below quantitation limits.
8. NS = Not Sampled.
9. Yellow shaded, bold text indicates exceedance of GCTL.
10. Orange shaded, bold text indicates exceedance of GCTL and NADC.

Table 7-3. VAB Area Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0046 35 to 45		MLPV-IW0047 35 to 45		MLPV-IW0048 40 to 50		MLPV-IW0049 38 to 48		MLPV-IW0050 40 to 50		MLPV-IW0051 45 to 55		MLPV-IW0052 40 to 50		MLPV-IW0053 35 to 45		MLPV-IW0054 40 to 50		MLPV-IW0055 40 to 50	
			Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16
VOCs (µg/L)																						
Trichloroethene	3	300	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.50 U	0.50 U	0.56 I	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.64 I	0.50 U	0.50 U	0.50 U	1.8	0.50 U	4.6	4	0.50 U	0.50 U	0.57 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.60 I	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	1	100	1.8	8.1	4.2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	81	79	130	52	1.1	0.50 U	1.1	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			MLPV-IW0056 30 to 40		MLPV-SAMW0001 43 to 48	MLPV-SAMW0003 43 to 48
			Nov-14	May-16	May-16	May-16
VOCs (µg/L)						
Trichloroethene	3	300	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.50 U	0.50 U	0.50 U	86
trans-1,2-Dichloroethene	100	1000	0.50 U	0.50 U	0.50 U	3.9
1,1-Dichloroethene	7	700	0.50 U	0.50 U	0.50 U	0.50 U
Vinyl Chloride	1	100	0.50 U	0.50 U	0.50 U	80

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			PCCA-MW0004 5 to 15											
			May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
			VOCs (µg/L)											
Trichloroethene	3	300	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	1.6	1.4	0.37 I	1.1	0.49 I	1.1	0.85 I	0.93 I	1.1	0.36 U	0.72 I	0.50 U
trans-1,2-Dichloroethene	100	1000	0.45 U	0.45 U	0.45 U	0.13 U	0.39 U	0.12 U	0.12 U	0.12 U	0.21 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	0.88 I	2.9	1.4	1.8	1.1	1.5	1.1	2.1	1.4	0.22 U	0.50 U	0.50 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTL NADC			PCCA-MW0017 15 to 25											
			May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16
VOCs (µg/L)														
Trichloroethene	3	300	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	70	700	0.56 I	0.74 I	0.2 U	0.12 U	0.083 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	1000	0.54 I	0.64 I	0.45 U	0.13 U	0.39 U	0.43 I	0.45 I	0.72 I	0.17 I	0.12 U	0.50 U	0.50 U
1,1-Dichloroethene	7	700	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	0.16 U	0.13 U	0.16 U	0.16 U	0.16 U	0.50 U	0.50 U
Vinyl Chloride	1	100	2.2	3.7	0.58 I	3.7	0.16 U	2.7	2.9	5.1	1.9	1.6	0.50 U	0.50 U

Notes:

1. ft BLS = feet Below Land Surface.

2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).

3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC).

4. µg/L = micrograms per liter.

5. U = Undetected.
6. J = estimated value below the reporting limit.

7. I = analyte detected below quantitation limits.

8. NS = Not Sampled.

9. Yellow shaded, bold text indicates exceedance of GCTL.

10. Orange shaded, bold text indicates exceedance of GCTL and NADC.

Table 7-3. VAB Area Summary of Historical Groundwater Data

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTLNADC			PRES-IW0007I 32 to 37														PRES-IW0009 40 to 50		PRES-IW0010 40 to 50	
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	Nov-14	May-16	Nov-14	May-16
VOCs (µg/L)																				
Trichloroethene	3	300	0.50 U	0.38 U	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	70	700	25.0	12.4	13.8	5.8	7.6	5.9	4.5	NS	3.4	NS	1.1	1.1	0.50 U	0.50 U	4.3	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	100	1000	0.79 I	0.20 U	0.87 I	0.79 I	0.67 I	0.13 U	0.61 I	NS	0.49 I	NS	0.36 I	0.42 I	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.16 U	0.16 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	1	100	8.1	0.34 U	10.8	9.3	11.8	7.8	6	NS	5.4	NS	1.9	2.4	0.93 I	0.50 U	2.9	0.5 U	0.5 U	0.5 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTLNADC			SATV-IW0009I 22 to 27														SATV-IW0010 35 to 45	
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	Nov-14	May-16
VOCs (µg/L)																		
Trichloroethene	3	300	2.7	2.4	0.82 I	1.6	0.32 U	0.63 I	0.92 I	NS	0.61 I	NS	0.98 I	1.2	0.5 U	0.5 U	1.4	0.5 U
cis-1,2-Dichloroethene	70	700	18.2	35.9	10.1	24.6	1.9	11	12	NS	6	NS	16	34	1.2	2.7	16	0.5 U
trans-1,2-Dichloroethene	100	1000	8.2	28.4	32.3	29.3	16.8	25	23	NS	17	NS	19	31	1.9	2.7	12	0.5 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.13 U	NS	0.26 I	0.45 I	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	1	100	0.50 U	18.9	40.7	31.9	26.6	24	0.16 U	NS	16	NS	10	15	0.5 U	0.5 U	0.5 U	0.5 U

Well ID: Screened Interval (ft BLS): Sample Date: Screening Criteria GCTLNADC			WCPS-IW0001SR 2.5 to 12.5														WCPS-IW0016 15 to 25	
			May-07	Nov-07	May-08	Nov-08	May-09	Nov-09	May-10	Nov-10	May-11	Nov-11	Nov-12	May-13	Nov-14	May-16	Nov-14	May-16
VOCs (µg/L)																		
Trichloroethene	3	300	0.50 U	0.40 I	0.32 U	0.32 U	0.32 U	0.15 U	0.12 U	NS	0.16 U	NS	0.16 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	70	700	62.7	45.8	65.1	40.9	63.3	55	28	NS	36	NS	46	15	7.9	9	1.8	6
trans-1,2-Dichloroethene	100	1000	3.0	2.2	4.2	2.3	3.3	3.2	1.8	NS	2.1	NS	2.5	0.63 I	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	7	700	0.50 U	0.23 U	0.54 U	0.54 U	0.54 U	0.16 U	0.41 U	NS	0.16 U	NS	0.16 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	1	100	14.5	12.2	24.5	16.3	25.7	19	10	NS	21	NS	20	3.3	20	28	1.9	0.5 U

- Notes:
1. ft BLS = feet Below Land Surface.

2. GCTL = Groundwater Cleanup Target Levels (Chapter 62-777, FAC).

3. NADC = Natural Attenuation Default Concentrations (Chapter 62-777, FAC)

4. µg/L = micrograms per liter.

5. U = Undetected.

6. J = estimated value below the reporting limit.

7. I = analyte detected below quantitation limits.

8. NS = Not Sampled.

9. Yellow shaded, bold text indicates exceedance of GCTL.

10. Orange shaded, bold text indicates exceedance of GCTL and NADC.



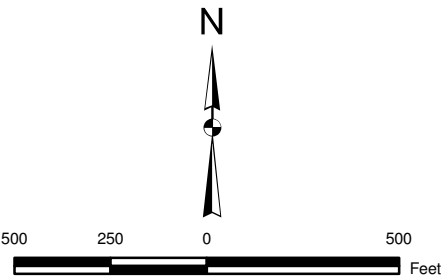
Figure 7-1
VAB Area Shallow Zone Potentiometric Surface Map – May 2016

Legend

- Shallow Monitoring Well Location {screen interval} and [groundwater elevation]
- Biosparge Well Location

- Equipotential Line
- Generalized Groundwater Flow Direction

Notes:
1. Screen interval is presented in feet, below land surface (ft, BLS).
2. Groundwater elevation is presented in ft, NAVD88.
3. * indicates elevation was not used for contouring.
4. NM indicates not measured.



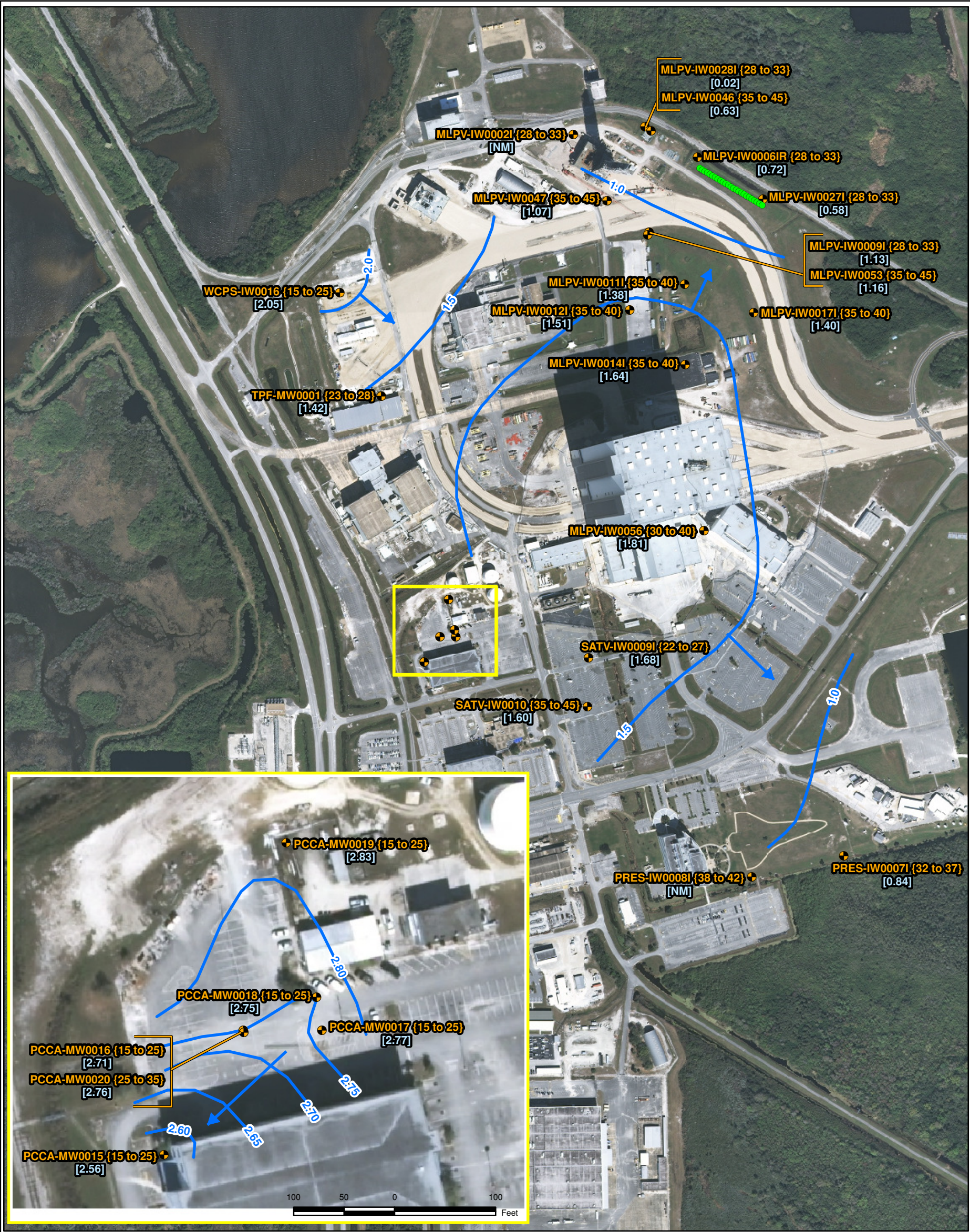


Figure 7-2
VAB Area Intermediate Zone Potentiometric Surface Map - May 2016

Legend

- Intermediate Monitoring Well Location {screen interval} and [groundwater elevation]
- Biosparge Well Location
- Equipotential Line
- Generalized Groundwater Flow Direction

Notes:

- Screen interval is presented in feet, below land surface (ft, BLS).
- Groundwater elevation is presented in ft, NAVD88.
- NM indicates not measured.

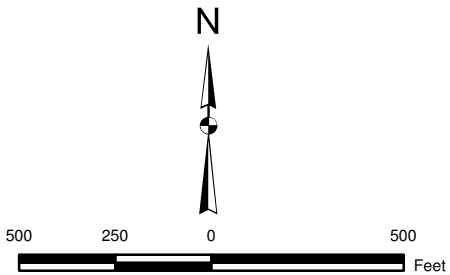




Figure 7-3
VAB Area Deep Zone Potentiometric Surface Map - May 2016

Legend

- Deep Monitoring Well Location {screen interval} and [groundwater elevation]
- Biosparge Well Location

- Inferred Equipotential Line
- Equipotential Line
- Generalized Groundwater Flow Direction

Notes:
1. Screen interval is presented in feet, below land surface (ft, BLS).
2. Groundwater elevation is presented in ft, NAVD88.
3. * indicates not used for contouring.
4. NM indicates not measured.

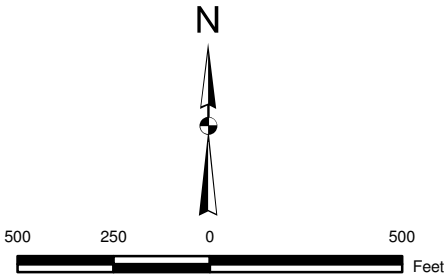
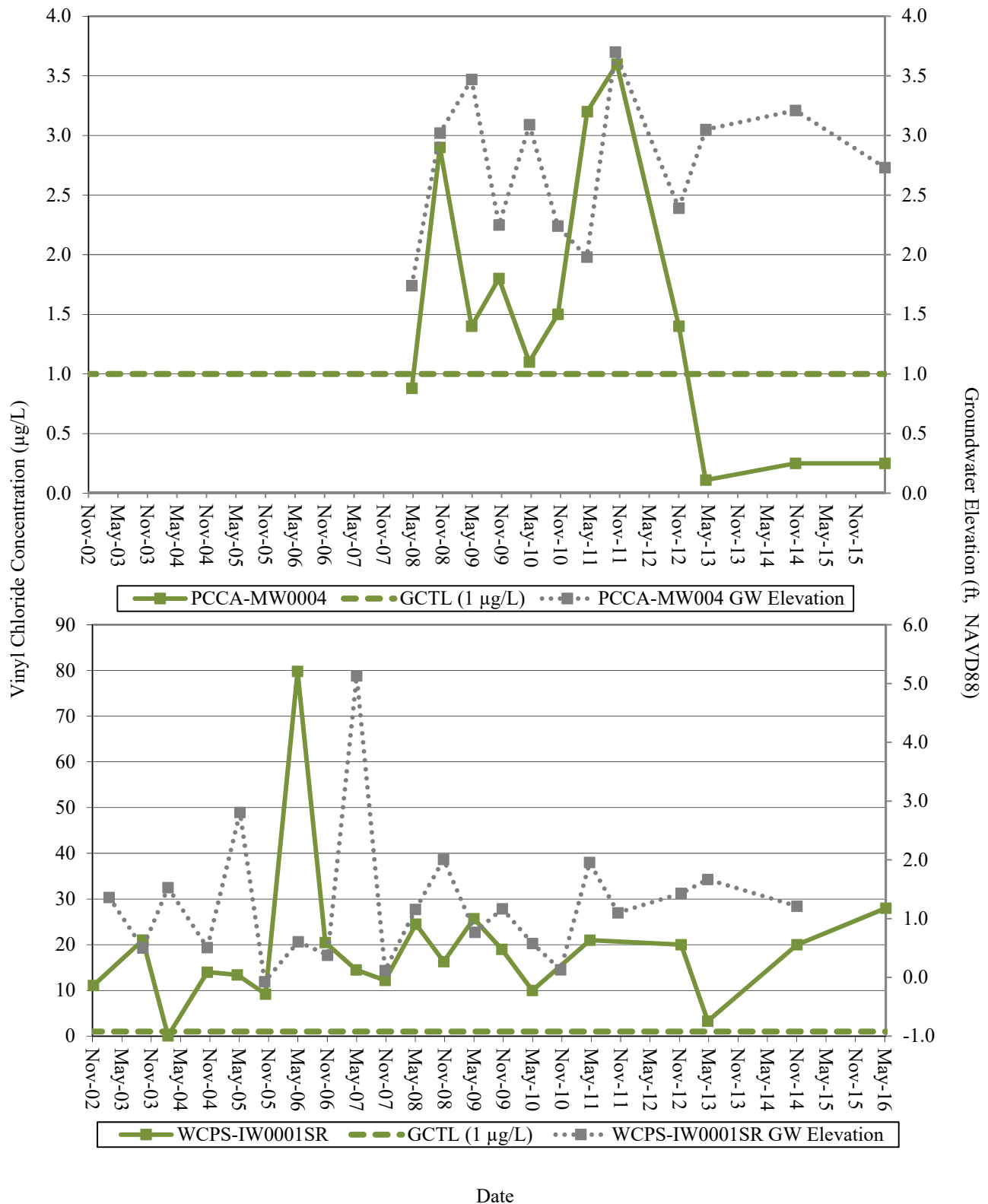


Figure 7-4. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Shallow Wells



**Figure 7-5. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells
Upgradient of the Biosparge Wall**

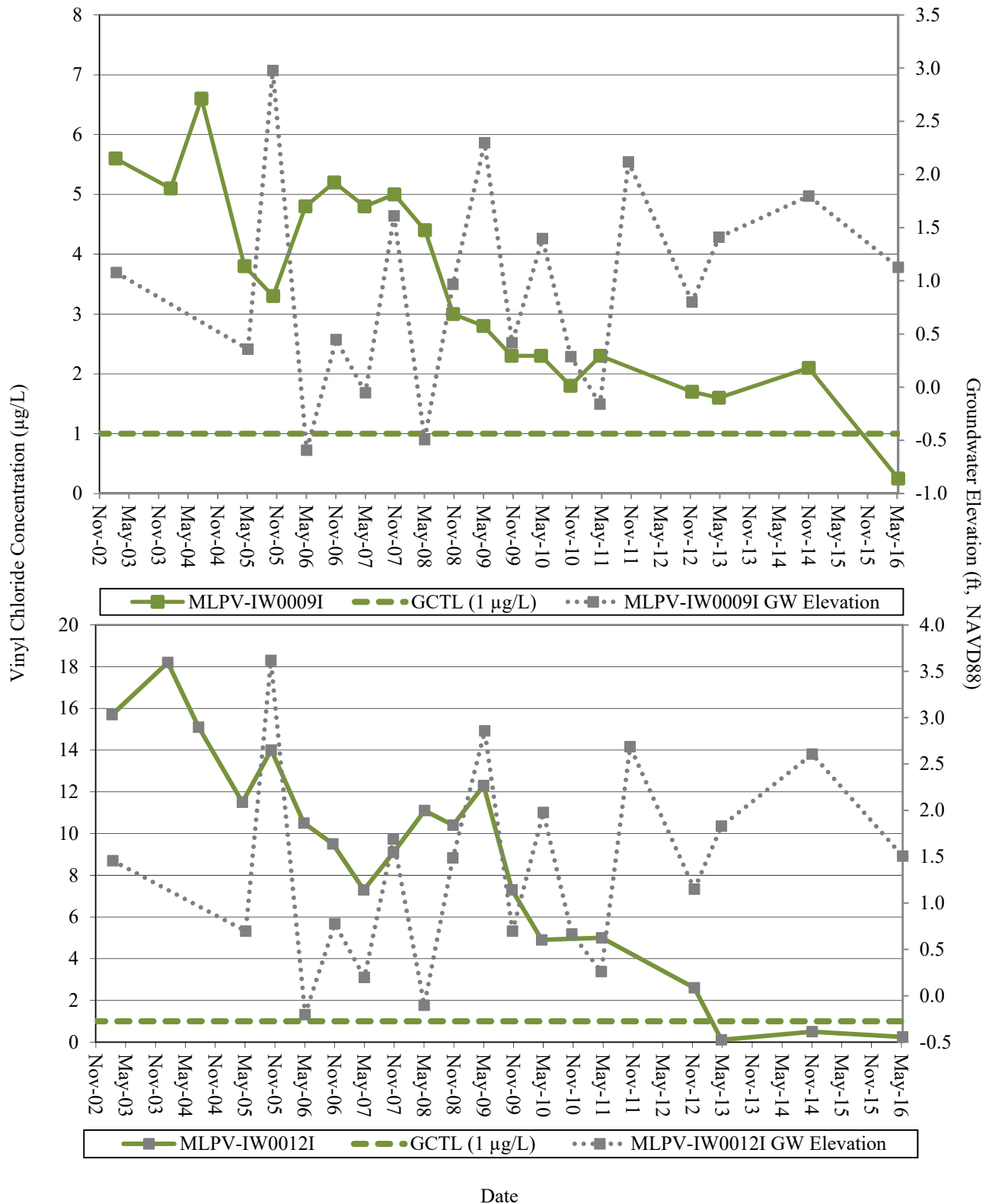


Figure 7-6. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells Downgradient of the Biosparge Wall

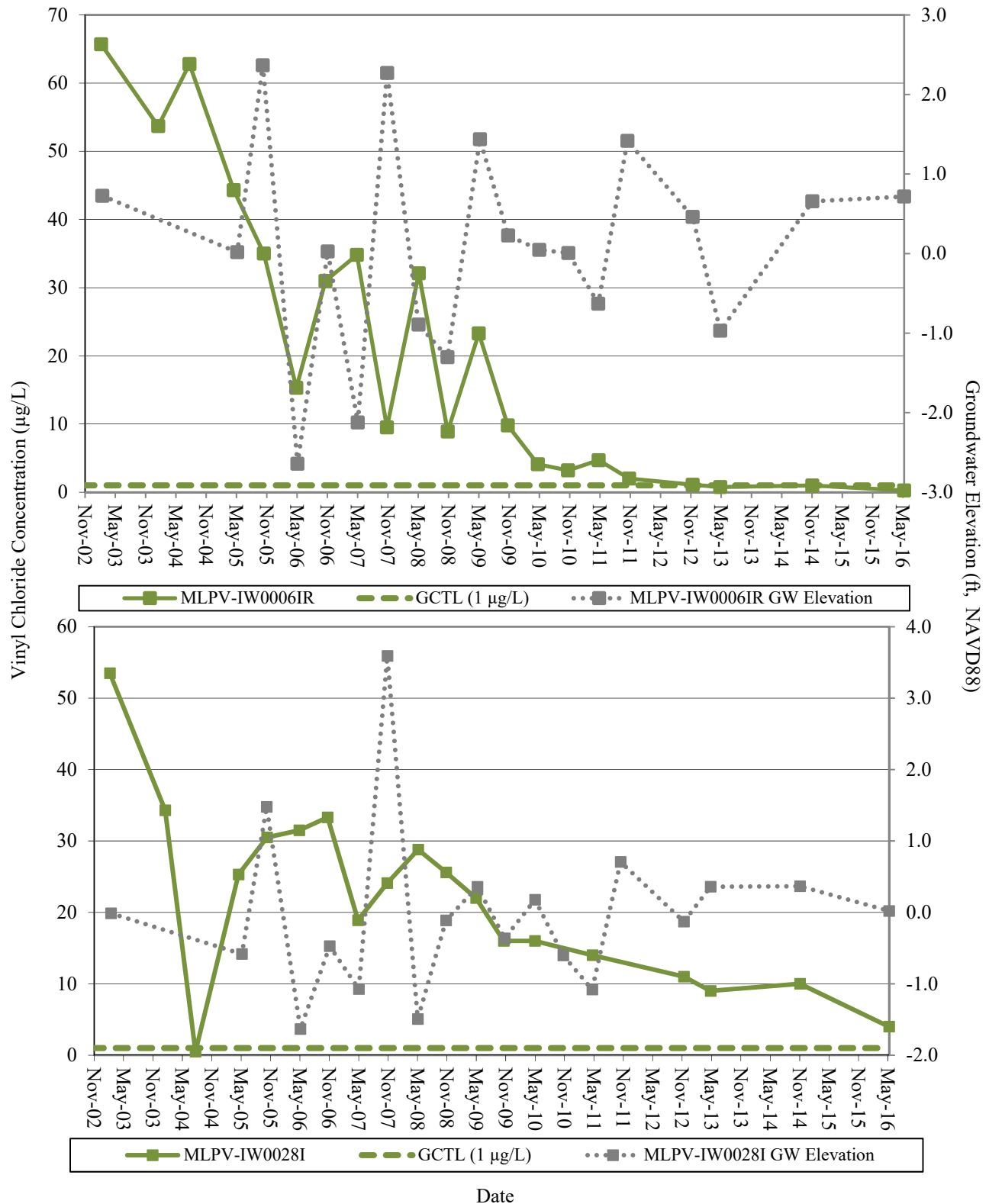


Figure 7-7. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells in the PCCA and SATV Areas

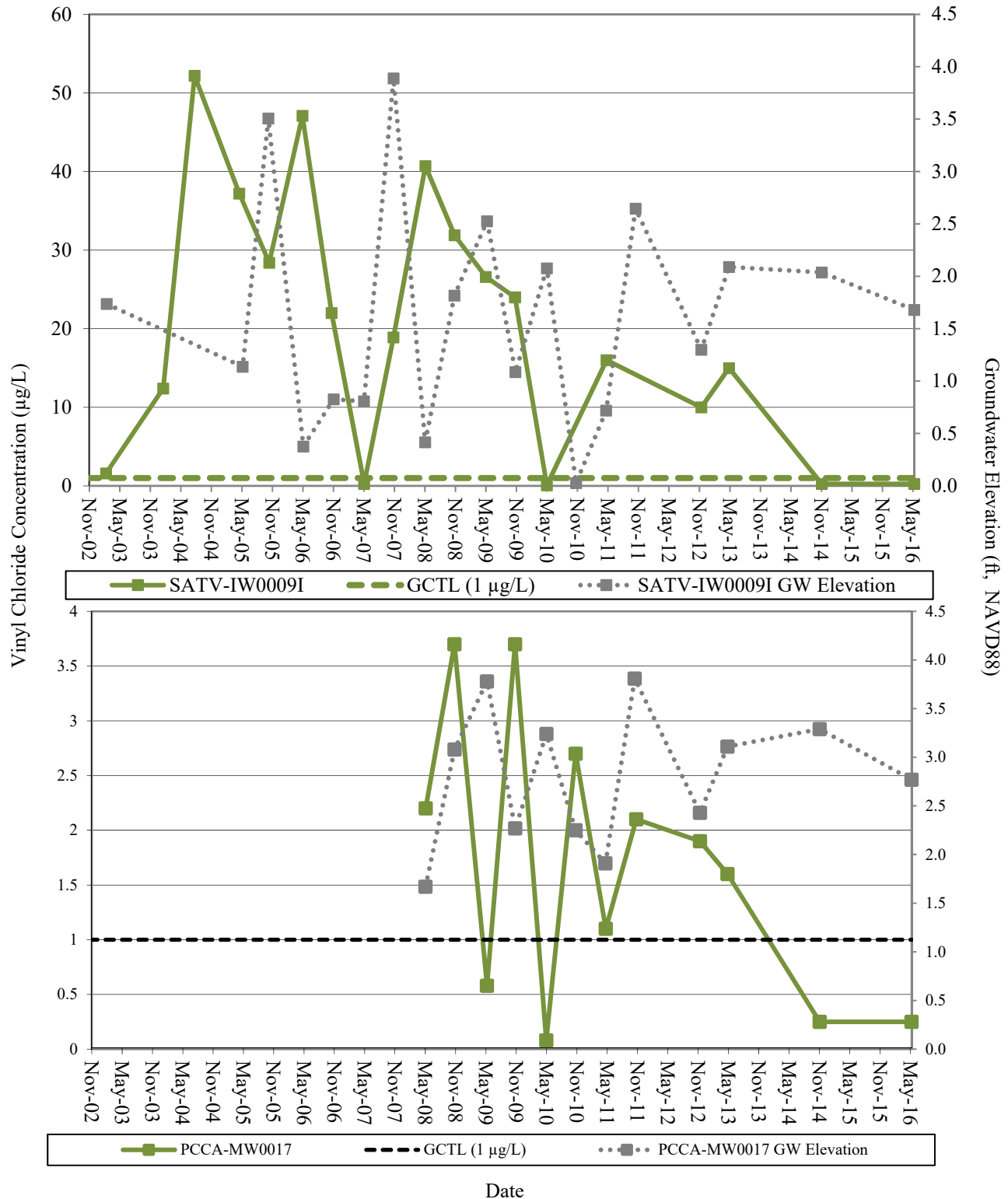


Figure 7-8. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Intermediate Wells in the PRES Area

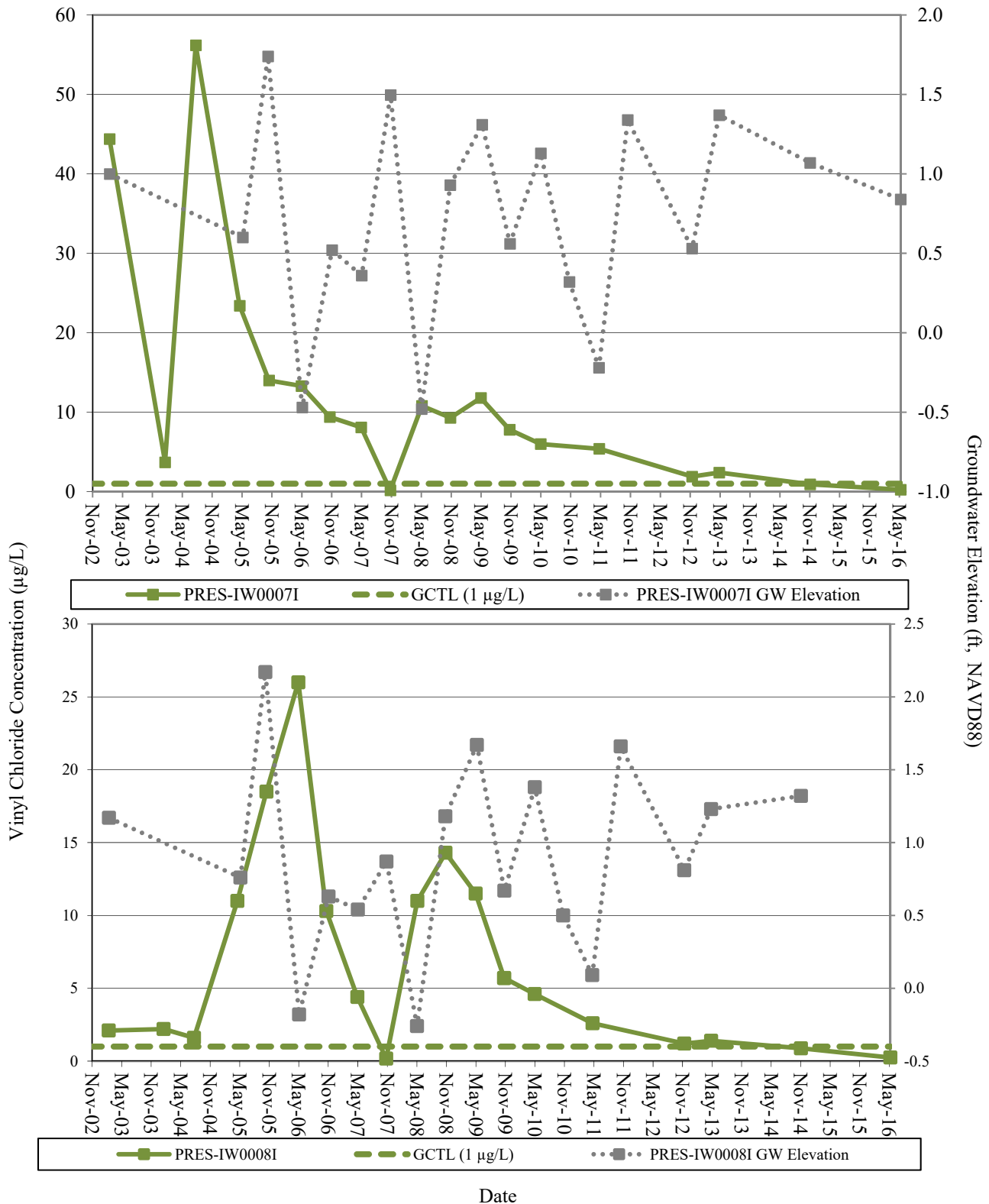


Figure 7-9. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Deep Wells

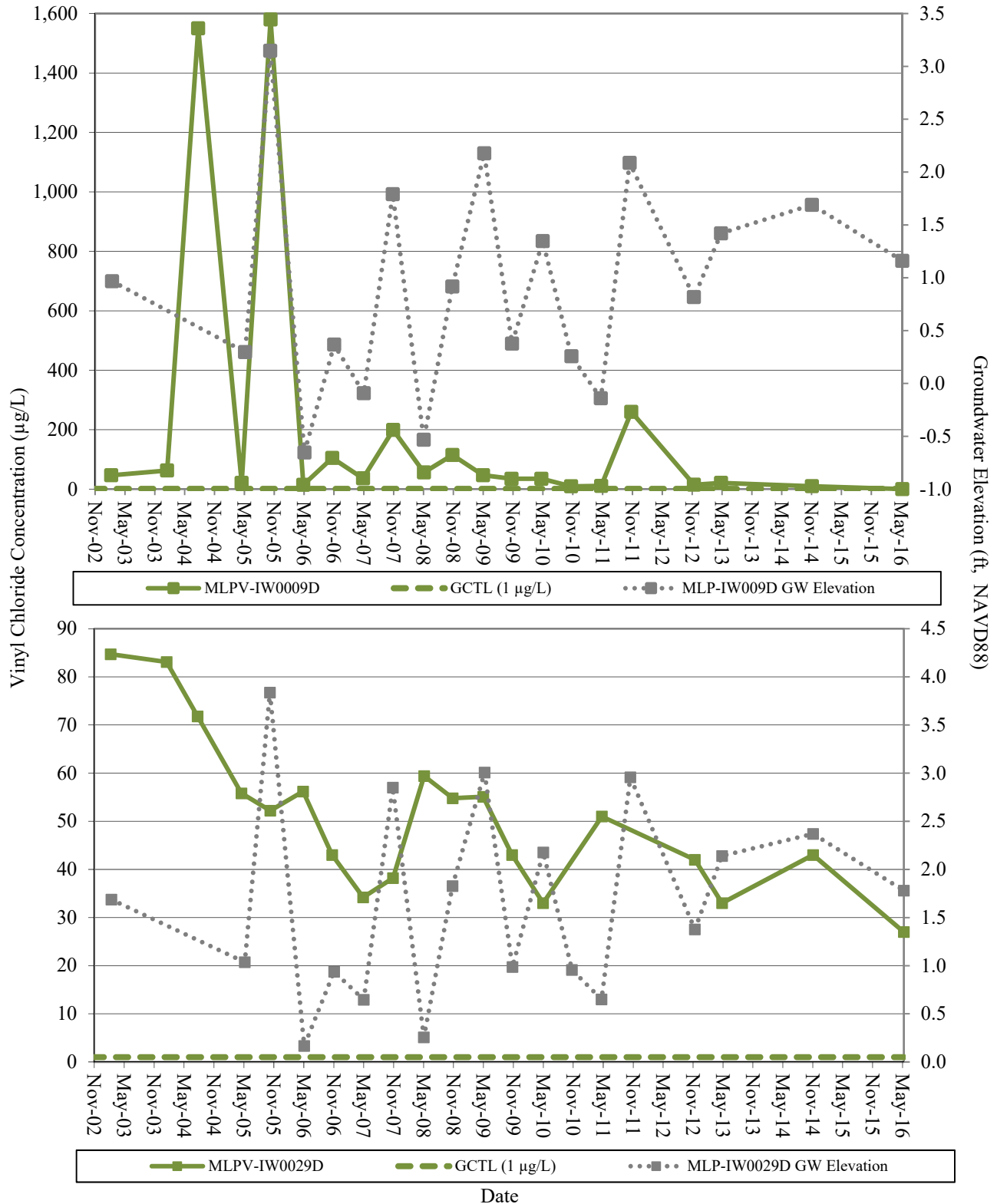


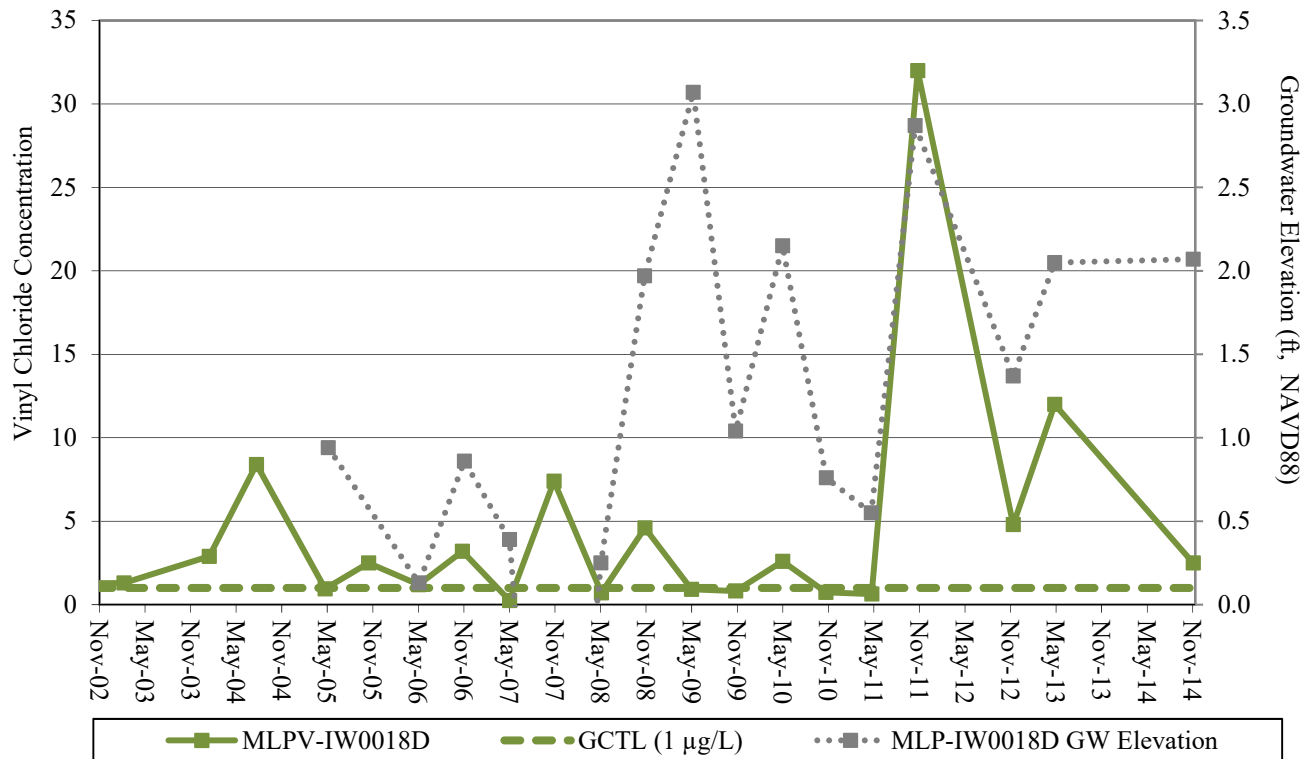
Figure 7-9. VAB Area Hydrographs and Trend Plots of Vinyl Chloride in Deep Wells



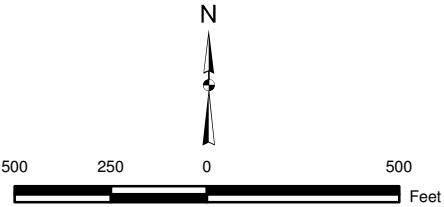
Figure 7-10
VAB Area Summary of Vinyl Chloride Results in Shallow Groundwater

Legend

- Shallow Monitoring Well Location {screen interval}
- Biosparge Well Location

Screening Criteria		
Parameter	GCTL	NADC
Vinyl Chloride	1	100

- Notes:
- Screen interval is presented in feet, below land surface (ft, BLS).
 - Results presented in µg/L.
 - I indicates analyte detected below quantitation limits.
 - NS indicates not sampled.
 - GCTL indicates Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
 - NADC indicates Natural Attenuation Default Concentration (Chapter 62-777, FAC).
 - Yellow shaded, bold text indicates exceedance of GCTL.
 - U indicates undetected.



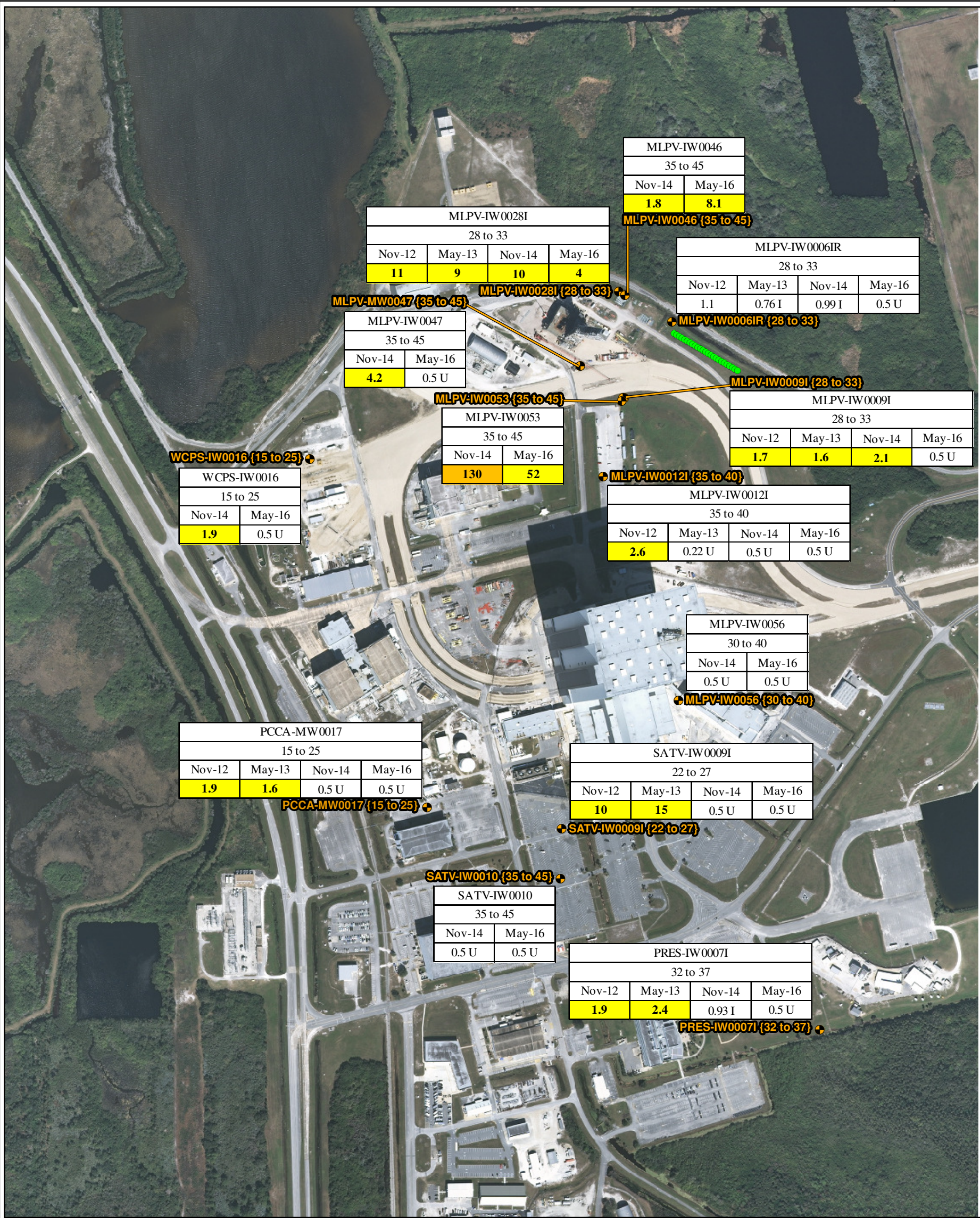


Figure 7-11
VAB Area Summary of Vinyl Chloride Results in Intermediate Groundwater

Legend

- Intermediate Monitoring Well Location {screen interval}
- Biosparge Well Location

Notes:

- Screen interval is presented in feet, below land surface (ft, BLS).
- Results are presented in µg/L.
- I indicates analyte detected below quantitation limits.
- U indicates undetected.
- GCTL indicates Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
- NADC indicates Natural Attenuation Default Concentration (Chapter 62-777, FAC).
- Yellow shaded, bold text indicates exceedance of GCTL.

Screening Criteria		
Parameter	GCTL	NADC
Vinyl Chloride	1	100

N

500 250 0 500 Feet

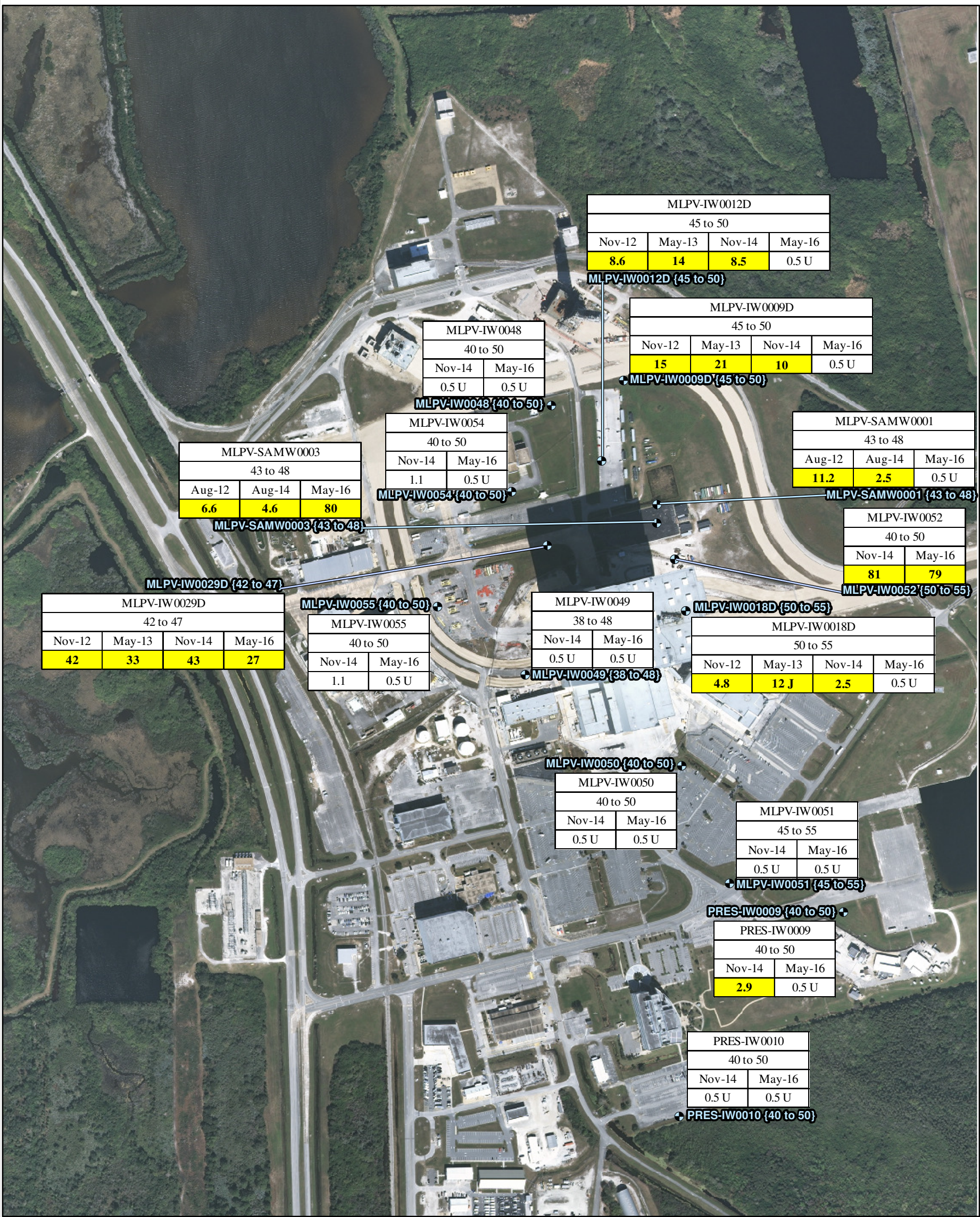


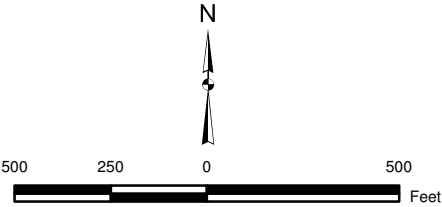
Figure 7-12
VAB Area Summary of Vinyl Chloride Results in Deep Groundwater

Legend

● Deep Monitoring Well Location
{screen interval}

- Notes:
1. Screen interval is presented in feet, below land surface (ft, BLS).
 2. Results are presented in µg/L.
 3. U indicates undetected.
 4. J indicates estimated value.
 5. GCTL indicates Groundwater Cleanup Target Levels (Chapter 62-777, FAC).
 6. NADC indicates Natural Attenuation Default Concentration (Chapter 62-777, FAC).
 7. Yellow shaded, bold text indicates exceedance of GCTL.
 8. Orange shaded, bold text indicates exceedance of GCTL and NADC.
 9. Previous data reported in the MLPV/VAB Area Corrective Measures Implementation and Interim Measures Annual Report, November 2015.

Screening Criteria		
Parameter	GCTL	NADC
Vinyl Chloride	1	100



SECTION VIII

RECOMMENDATIONS AND CONCLUSIONS

8.1 FS6 RECOMMENDATIONS

The following recommendations are made in the FS6 Area based on the May 2016 sampling event:

- Conduct sampling in November 2016 (end of wet season) in two wells for VOCs using low-flow sampling techniques.
- If VC results from the November sampling event are less than GCTL, propose No Further Action (NFA) for FS6 groundwater.
- If VC results from the November sampling event are greater than GCTL, resume biennial sampling with alternating seasons.

8.2 FDTL RECOMMENDATIONS

The following recommendations are made in the FDTL Area based on the May 2016 sampling event:

- Discontinue sampling at FDTL-IW13I because concentrations of TCE and VC have been below detection limits for three or more consecutive sampling events.

Continue sampling seven wells for VOCs using PDBs on a biennial basis with alternating seasons (next event in Fall 2018).

8.3 C5ES RECOMMENDATIONS

The following recommendations are made in the C5ES Area based on the May 2016 sampling event:

- Discontinue sampling C5ES-MW10I, C5ES-MW12S, and C5ES-MW12I because concentrations of VC have been below GCTL for at least two consecutive sampling events.
- Continue sampling three wells for VOCs using PDBs on a biennial basis with alternating

seasons (next event in Fall 2018).

8.4 SFOC AREA RECOMMENDATIONS

The following recommendations are made in the Shuttle Flight Operations Contract Generator Maintenance Facility (SFOC) Area based on the May 2016 sampling event:

- Continue sampling SFOC-IW1S and SFOC-IW4S for antimony on a biennial basis with alternating seasons (next event in Fall 2018). Prior to next sampling event, install a new monitoring well located adjacent to SFOC-IW1S (screened from 6 to 16 feet below land surface with 0.006-inch slot screen and fine sand filter pack) and sample on a biennial basis to evaluate if the results are more representative of the surficial aquifer conditions.

8.5 VAB AREA RECOMMENDATIONS

The following recommendations are made in the VAB Area based on the May 2016 sampling event.

- Discontinue sampling at one shallow well (PCCA-MW004), seven intermediate wells (MLPV-IW0006IR, MLPV-IW0012I, MLPV-IW0056, SATV-IW0009I, SATV-IW0010, PCCA-MW0017, and PRES-IW0007I), and seven deep wells (MLPV-IW0048, MLPV-IW0049, MLPV-IW0050, MLPV-IW0051, MLPV-IW0054, MLPV-IW0055, and PRES-IW0010) because concentrations of VC have been below GCTL for at least two consecutive sampling events.
- Continue sampling at 13 wells for VOCs using PDBs and two wells for VOCs using low flow purging techniques on a biennial basis with alternating seasons (next event in Fall 2018).
- Add two intermediate wells (SATV-IW0004I and VABU-IW0001I) and two deep wells (MLPV-IW0020D and VAB-IW0005D) to the VAB LTM sampling plan (next event Fall 2018).

8.6 SUMMARY

Table 8-1 provides a summary of the wells to be sampled and the analyses to be performed in Fall 2018.

Table 8-1 Monitoring Wells to be Sampled for VAB Area LTM in 2018

Well ID	Area	Screened Interval (ft BLS)	Water Levels	Parameters to be Analyzed in Fall 2018
FS6-MW0001	FS6	25 to 35	✓	VOCs*
FS6-MW0003		20 to 30	✓	VOCs*
FDTL-IW0015S	FDTL	5 to 15	✓	VOCs
FDTL-IW0007I		10 to 20	✓	VOCs
FDTL-IW0008I		10 to 20	✓	VOCs
FDTL-IW0009I		10 to 20	✓	VOCs
FDTL-IW0014I		10 to 20	✓	VOCs
FDTL-IW0017I		10 to 20	✓	VOCs
FDTL-IW0019I		10 to 20	✓	VOCs
C5ES-MW0017S	C5ES	7 to 12	✓	VOCs
C5ES-MW0018S		7 to 12	✓	VOCs
C5ES-MW0019I		13 to 23	✓	VOCs
SFOC-IW0001S	SFOC	2 to 12	✓	Total Antimony
SFOC-IW0004S		2 to 12	✓	Total Antimony
SFOC-IW0007S**		6 to 16	✓	Total Antimony
MLPV-IW0009D	VAB	45 to 50	✓	VOCs
MLPV-IW0009I		28 to 33	✓	VOCs
MLPV-IW0012D		45 to 50	✓	VOCs
MLPV-IW0018D		50 to 55	✓	VOCs
MLPV-IW0020D		45 to 50	✓	VOCs
MLPV-IW0028I		28 to 33	✓	VOCs
MLPV-IW0029D		42 to 47	✓	VOCs
MLPV-IW0046		35 to 45	✓	VOCs
MLPV-IW0047		35 to 45	✓	VOCs
MLPV-IW0052		40 to 50	✓	VOCs
MLPV-IW0053		35 to 45	✓	VOCs
MLPV-SAMW0001		43 to 48	✓	VOCs
MLPV-SAMW0003		43 to 48	✓	VOCs
PRES-IW0009		40 to 50	✓	VOCs
SATV-IW0004I		25 to 30	✓	VOCs
VAB-IW0005D		52 to 57	✓	VOCs
VABU-IW0001I		20 to 30	✓	VOCs
WCPS-IW0001SR		2.5 to 12.5	✓	VOCs
WCPS-IW0016		15 to 25	✓	VOCs

Notes:

1. BLS = Below Land Surface.
2. ft = feet.
3. VOCs indicates volatile organic compounds collected using passive diffusion bags (PDBs).
4. "**" indicates Low-flow sampling of these wells will be conducted in November 2016.
5. "***" indicates monitoring well to be installed prior to Fall 2018 sampling event.
6. Grey shading indicates groundwater samples will be collected using low flow purging techniques.

SECTION IX

REFERENCES

Florida Department of Environmental Protection. 30 July 2014. Chapter 62-160, Florida Administrative Code, Quality Assurance, Standard Operating Procedures for Field Activities, DEP-SOP-001/01.

National Aeronautics and Space Administration. June 2011. *Sampling and Analysis Plan for the RCRA Corrective Action Program at the John F. Kennedy Space Center, Florida (Revision 4)*, prepared by Geosyntec Consultants, NASA Document Number KSC-TA-6169.

National Aeronautics and Space Administration, November 2015. *Corrective Measures Implementation and Interim Measures Annual Report: Summary of Biosparge and Air Sparge System Operation and Maintenance and Interim Groundwater Monitoring, John F. Kennedy Space Center, Florida (Revision 0)*, prepared by Geosyntec Consultants, Titusville, Florida.

APPENDIX A

APPLICABLE REMEDIATION TEAM MEETING MINUTES

Revision 1 Meeting Minutes for September 1st and 2nd, 2016

Revision 1 Meeting Minutes for September 1st and 2nd, 2016.

Attendees:

John Armstrong/FDEP (phone)
Rosaly Santos-Ebaugh/NASA
Anne Chrest/NASA
Dinh Vo/NASA
Mike Deliz/NASA
Natasha Darre/NASA
Chris Adkison/Jacobs
Deda Johansen/Jacobs
Guy Fazzio/Jacobs
Sarah Damphousse/CORE
Melissa Hensley/Geosyntec
Jim Langenbach/Geosyntec
Rebecca Daprato/Geosyntec

Emily Lawson/Geosyntec
Joseph Bartlett/Geosyntec
Tom Peel/Geosyntec
Alex Warzinski/Geosyntec
Mike Burcham/Geosyntec
Kevin Warren/Geosyntec
Cathy Soistman/Geosyntec
Ben Coppenger/Geosyntec
Mark Speranza/Tetra Tech
Chris Hook/Tetra Tech
Chris Neuman/Tetra Tech
Alex Murphy/Tetra Tech

1609-M13 Jim Langenbach/ Geosyntec Vehicle Assembly Building (VAB) Area Long Term Monitoring (LTM) (SWMUs 40, 44, 56, 66, 72, 74, 75, 80, 81, 83, 101, 106, 107, and 108)

Goal: Obtain team consensus on path forward for each site.

Discussion: Fire Station No. 6 (FS6) (SWMU 106) was incorporated into VAB LTM program in 2014. The biennial event was conducted in May 2016. VC was not detected in either well sampled and concentrations decreased from 2013 to 2016. Recommendation to continue biennial monitoring. If next event (November 2016) has VC concentrations less than GCTLs, propose NFA for groundwater.

Team consensus reached to conduct sampling in November 2016 (end of wet season) at MW0001 and MW0003 for VOC analysis using low-flow sampling techniques.

Former Development and Testing Laboratory (FDTL) (SWMU 075) was incorporated into the VAB LTM program in 2016. The biennial event was conducted in May 2016. TCE and VC are the constituents of concern (COCs).

VC was greater than the GCTL in IW0015S (shallow well). TCE was greater than the GCTL in two of the seven intermediate wells sampled, with concentrations ranging from 4.2 to 5 µg/L. VC was greater than the GCTL in three of seven intermediate wells sampled, with concentrations ranging from 1.5 to 62 µg/L. cDCE was detected in four of seven wells, all below the GCTL.

Revision 1 Meeting Minutes for September 1st and 2nd, 2016

Team consensus reached to discontinue sampling of IW0013I as TCE and VC have not been detected for three or more consecutive sampling events.

Team consensus reached to continue sampling IW0007I, IW0014I, IW0008I, IW0009I, IW0015S, IW0017I, and IW0018I for VOCs using passive diffusion bags (PDB) on a biennial basis with alternating seasons (next event in Fall of 2018).

C-5 Electrical Substation (C5ES) (SWMU 66) biennial sampling event was conducted May 2016. The COC is VC in groundwater. One of the three wells sampled in the shallow zone had a VC exceedance (23 µg/L, MW0018S). One of the three wells sampled in the intermediate zone had a VC exceedance (29 µg/L, MW0019I). Based on the Mann-Kendall Statistical analysis for VC, five wells had decreasing trends and one well had a stable trend.

Team consensus reached to discontinue sampling of MW0010I, MW0012S, and MW0012I, as VC concentrations have been below GCTLs for at least two consecutive sampling events.

Team consensus reached to sample MW0017S, MW0018S, and MW0019I for VOCs using passive diffusion bags (PDBs) on a biennial basis with alternating seasons (next event in Fall of 2018), pending the implementation of the IM.

NASA anticipates that the IM for C5 will be funded in 2017 (currently no contract).

Shuttle Flight Operations Contract Generator Maintenance Facility Area (SFOC) (SWMU 81) biennial sampling event was conducted May 2016. The COC is antimony in groundwater. Antimony concentration in IW0001S is above the GCTL but below the NADC for the first time since May 2011. Antimony appears to be associated with soil in the smear zone and possibly not representative of aquifer conditions.

Team consensus reached to continue sampling SFOC-IW1S and SFOC-IW4S for antimony on a biennial basis, with alternating seasons (next event in Fall 2018).

Revision 1 Meeting Minutes for September 1st and 2nd, 2016

Team consensus reached to install a new monitoring well using a larger diameter borehole adjacent to SFOC-IW1S (screened from approximately 6 to 16 ft BLS with 0.006 inch slot screen and fine sand filter pack) and sample to evaluate if results are more representative of the surficial aquifer conditions.

Mobile Launch Platform/Vehicle Assembly Building Area biennial sampling event was conducted May 2016. The COC is VC in groundwater. One well of 2 sampled in the shallow zone had a GCTL exceedance of VC. In the intermediate zone, three of the fourteen wells sampled had exceedances of the GCTL for VC, with concentrations ranging from 4 to 52 µg/L. Three of thirteen wells sampled in the deep zone had exceedances of the GCTL for VC, with concentrations ranging from 27 to 80 µg/L. Result of the Mann-Kendall statistical analysis for VC indicate that of the fifteen wells sampled twelve wells exhibited decreasing trends and three wells had no trends. There were no wells sampled that exhibited increasing trends.

Team did not obtain consensus on the next LTM event for the VAB Area. Team discussed the potential need for installing wells that represent the current LCP boundary. Team plans to look at some of the wells that weren't used previously in the LTM that may now be on the fringe of the LCP, and determine an overall monitoring well network that is consistent with the current plume periphery. If there is a need to install additional wells, a recommendation will be made. A new set of proposed wells for monitoring this site will be a basket item for the October team meeting.

Results: Decision item 1906-D42 to D48

September 2016 Decision items Rev 1		
Decision No.	Minutes reference	Decision
1609-D42	1609-M13	<u>Fire Station No. 6 (FS6) (SWMU 106)</u> - Team consensus reached to conduct sampling in November 2016 (end of wet season) at MW0001 and MW0003 for VOC analysis using low-flow sampling techniques.
1609-D43	1609-M13	<u>Former Development and Testing Laboratory (FDTL) (SWMU 075)</u> - Team consensus reached to discontinue sampling of IW0013I as TCE and VC have not been detected for three or more consecutive sampling events.
1609-D44	1609-M13	<u>Former Development and Testing Laboratory (FDTL) (SWMU 075)</u> - Team consensus reached to continue sampling IW0007I, IW0014I, IW0008I, IW0009I, IW0015S, IW0017I, and IW0018I for VOCs using passive diffusion bags (PDB) on a biennial basis with alternating seasons (next event in Fall of 2018).
1609-D45	1609-M13	<u>C-5 Electrical Substation (C5ES) (SWMU 66)</u> - Team consensus reached to discontinue sampling of MW0010I, MW0012S, and MW0012I, as VC concentrations have been below GCTLs for at least two consecutive sampling events.
1609-D46	1609-M13	<u>C-5 Electrical Substation (C5ES) (SWMU 66)</u> - Team consensus reached to sample MW0017S, MW0018S, and MW0019I for VOCs using passive diffusion bags (PDB) on a biennial basis with alternating seasons (next event in Fall of 2018) pending the implementation of the IM.
1609-D47	1609-M13	<u>Shuttle Flight Operations Contract Generator Maintenance Facility Area (SFOC) (SWMU 81)</u> - Team consensus reached to continue sampling SFOC-IW1S and SFOC-IW4S for antimony on a biennial basis, with alternating seasons (next event in Fall 2018).
1609-D48	1609-M13	<u>Shuttle Flight Operations Contract Generator Maintenance Facility Area (SFOC) (SWMU 81)</u> - Team consensus reached to install a new monitoring well using a larger diameter borehole adjacent to SFOC-IW1S (screened from approximately 6 to 16 ft BLS with 0.006 inch slot screen and fine sand filter pack) and sample to evaluate if results are more representative of the surficial aquifer conditions.

Revision 0 Meeting Minutes for October 20th, 2016

Revision 0 Meeting Minutes for October 20th, 2016.

Attendees:

John Armstrong/FDEP
Peter Cornais/FDEP
Rosaly Santos-Ebaugh/NASA
Anne Chrest/NASA
Dinh Vo/NASA
Mike Deliz/NASA
Harry Plaza/NASA
Deda Johansen/Jacobs

Eric Sager/Geosyntec
Jim Langenbach/Geosyntec
Rebecca Daprato/Geosyntec (phone)
Tom Peel/Geosyntec
Mark Speranza/Tetra Tech
Mark Jonnet/Tetra Tech
Chris Neuman/Tetra Tech

1604-M06 Jim Langenbach/ VAB LTM Area

Geosyntec

Goal: Obtain team consensus on path forward for VAB Area 2018 LTM program.

Discussion: The results on the 2016 LTM for the Mobile Launch Platform/Vehicle Assembly Building Area (VAB Area) were presented in the September 2016 meeting (please refer to discussion in meeting minute 1609-M13). The results from the 2016 LTM were reviewed from the September 2016 presentation.

In September 2016, the team discussed the potential need for installing wells or sampling existing wells not currently part of the LTM network that represent the current LCP boundary. Based on discussion in the September 2016 team meeting the Low Concentration Plume (LCP) from the Vehicle Assembly Building Reassessment (VABRA) and all wells in the VAB area were reviewed to determine an appropriate LTM monitoring well network to address the current LCP.

Team consensus reached to remove MLPV-IW0006IR as results have been less than GCTLs for four consecutive sampling events.

Team consensus reached to remove MLPV-IW0012I as results have been less than GCTLs for three consecutive sampling events as the dissolved plume footprint has retracted. IW0011I (currently sampled as part of MLP air sparge performance monitoring) will provide delineation for the western portion of the remaining LCP.

Team consensus reached to add MLPV-IW0020D. IW0020D was last sampled in 2003 with VC concentration of 201 µg/L. After the 2018 LTM sampling, may request removal of MLPV-IW0018D (VC

Revision 0 Meeting Minutes for October 20th, 2016

not detected in May 2016) which is located in the vicinity of IW0020D. If we add IW0020D to SAP, data will assist with confirming the shift in plume footprint for IW0018D.

Team consensus reached to remove MLPV-IW0048 as results have been less than GCTL for two consecutive sampling events. IW0011I (currently sampled as part of MLP air sparge performance monitoring) will provide delineation for the western portion of the remaining LCP.

Team consensus reached to removed MLPV-IW0054 and MLPV-IW0055 as results have been less than GCTLs for two consecutive sampling events.

Team consensus reached to remove MLPV-IW0049 as results have been less than GCTLs for two consecutive sampling events and add VABU-IW0001I to confirm current concentration and evaluate potential plume collapse. VABU-IW0001I was last sampled in 1997 with a VC concentration of 4.3 µg/L.

Team consensus reached to remove MLPV-IW0050 as results have been less than GCTLs for two consecutive sampling events and add VAB-IW0005D to confirm current concentration and evaluate potential plume collapse. VAB-IW0005D was last sampled in 2003 with a VC concentration of 6.8 µg/L.

Team consensus reached to remove MLPV-IW0051 as results have been less than GCTLs for two consecutive sampling events. The lack of impact is further confirmed by VAB-IW0006D to the northeast with VC less than GCTL in 2004 and PRES-IW0009 with VC less than GCTL in 06/2016.

Team consensus reached to remove MLPV-IW0056 as results have been less than GCTLs for two consecutive sampling events.

Team consensus reached to remove SATV-0009I and SATV-IW0010 as results have been less than GCTLs for two consecutive sampling events and add SATV-IW0004I to confirm current concentration and evaluate potential plume collapse. SATV-IW0004I was last sampled in 2002 with cDCE concentration of 130 µg/L.

Revision 0 Meeting Minutes for October 20th, 2016

Team consensus reached to remove PRES-IW0007I, PRES-IW0010, and PCCA-MW0017 as results have been less than GCTLs for two consecutive sampling events.

Team consensus reached to remove PCCA-MW0004 as results have been less than GCTLs for four consecutive sampling events.

Team consensus reached on sampling and VOC analysis of the following monitoring wells for the 2018 VAB LTM: WCPS-IW0001SR, WCPS-IW0016, MLPV-IW0009I, MLPV-IW0028I, MLPV-IW0046, MLPV-IW0047, MLPV-IW0053, SATV-IW0004I, VABU-IW0001I, MLPV-IW0029D, MLPV-IW0009D, MLPV-IW0012D, MLPV-IW0018D, MLPV-IW0020D, MLPV-IW0052, MLPV-SAMW0001, MLPV-SAMW0003, PRES-IW0009, and VAB-IW0005D.

Results: Decision items 1610-D18 to D30

October 2016 Decision items Rev 0		
Decision No.	Minutes reference	Decision
1610-D18	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0006IR as results have been less than GCTLs for four consecutive sampling events.
1610-D19	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0012I as results have been less than GCTLs for three consecutive sampling events as the dissolved plume footprint has retracted.
1610-D20	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to add MLPV-IW0020D. IW0020D was last sampled in 2003 with VC concentration of 201 µg/L.
1610-D21	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0048 as results have been less than GCTL for two consecutive sampling events.
1610-D22	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to removed MLPV-IW0054 and MLPV-IW0055 as results have been less than GCTLs for two consecutive sampling events.
1610-D23	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0049 as results have been less than GCTLs for two consecutive sampling events and add VABU-IW0001I to confirm current concentration and evaluate potential plume collapse.
1610-D24	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0050 as results have been less than GCTLs for two consecutive sampling events and add VAB-IW0005D to confirm current concentration and evaluate potential plume collapse.
1610-D25	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0051 as results have been less than GCTLs for two consecutive sampling events.
1610-D26	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove MLPV-IW0056 as results have been less than GCTLs for two consecutive sampling events.
1610-D27	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove SATV-0009I and SATV-IW0010 as results have been less than GCTLs for two consecutive sampling events and add SATV-IW0004I to confirm current concentration and evaluate potential plume collapse.
1610-D28	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove PRES-IW0007I, PRES-IW0010, and PCCA-MW0017 as results have been less than GCTLs for two consecutive sampling events.
1610-D29	1609-M06	<u>VAB LTM Area</u> - Team consensus reached to remove PCCA-MW0004 as results have been less than GCTLs for four consecutive sampling events.
1610-D30	1609-M06	<u>VAB LTM Area</u> - Team consensus reached on sampling and VOC analysis of the following monitoring wells for the 2018 VAB LTM: WCPS-IW0001SR, WCPS-IW0016, MLPV-IW0009I, MLPV-IW0028I, MLPV-IW0046, MLPV-IW0047, MLPV-IW0053, SATV-IW0004I, VABU-IW0001I, MLPV-IW0029D, MLPV-IW0009D, MLPV-IW0012D, MLPV-IW0018D, MLPV-IW0020D, MLPV-IW0052, MLPV-SAMW0001, MLPV-SAMW0003, PRES-IW0009, and VAB-IW0005D.

APPENDIX B

FIELD FORMS

(IN ELECTRONIC COPY ONLY)

Water Quality Instrument Calibration Form

Project/Site: VAB LTM

Project #: FR07410D

Field Personnel: A. W. W. W. W.

Water Quality Meter - Model/Serial#: YSI 556 MPS / 07F100621

Turbidimeter - Model/Serial#: HACH 2100Q 150605041572

Dissolved Oxygen (FDEP SOP FT 1500)	Date	Time	Temp (°C)	Saturation (mg/L)*	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3 mg/L							
CAL ICV CCV	5/24/16	7:09	23.12	8.562	8.55/8.56	99.9/100	P F
CAL ICV CCV	↓	17:19	24.12	8.403	8.38	99.6	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Specific Conductance (FDEP SOP FT 1200)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mS/cm)	Reading (mS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%							
Specific Conductance Probe Cleaned?	Yes	NO					
CAL ICV CCV	5/24/16	7:31	11681	6/20/16	1.413	1.343/1.43	P F
CAL ICV CCV	↓	17:28	↓	↓	↓	1.408	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

pH (FDEP SOP FT 1100)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (SU)	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU							
CAL ICV CCV	5/24/16	7:12	1602168	8/20/17	7.0	7.28/7.0	P F
CAL ICV CCV	↓	7:19	1505043	5/20/17	4.0	3.88/4.00	P F
CAL ICV CCV	↓	7:28	2504514	9/14/16	10.0	8.84/9.97	P F
CAL ICV CCV	↓	17:20	SAME	SAME	SAME	6.95	P F
CAL ICV CCV	↓	17:22	SAME	SAME	SAME	3.89	P F
CAL ICV CCV	↓	17:24	SAME	SAME	SAME	9.86	P F

ORP (FDEP SOP N/A)	Date	Time	Standard Lot #	Standard Exp. Date	Standard (mV @ Temp °C)	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%							
Dissolved Oxygen Membrane Changed?	Yes	NO					
CAL ICV CCV	5/24/16	7:33	8032	9/20/14	240 @ 25	231.1/240.0	P F
CAL ICV CCV	↓	17:26	↓	↓	↓	239.8	P F
CAL ICV CCV							P F
CAL ICV CCV							P F

Turbidity 0.1-10 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL ICV CCV	5/24/16	10.0	9.66	P F
CAL ICV CCV	↓	↓	10.1	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 11-40 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL ICV CCV	5/24/16	20	20.2	P F
CAL ICV CCV	↓	↓	21.0	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity 41-100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL ICV CCV	5/24/16	100	99.8	P F
CAL ICV CCV	↓	↓	100	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Turbidity >100 NTU	Date	Standard (NTU)	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL ICV CCV	5/24/16	800	796	P F
CAL ICV CCV	↓	↓	802	P F
CAL ICV CCV				P F
CAL ICV CCV				P F

Notes:

CAL = Initial Calibration

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

* See Table FS 2200-2 on the back of this form

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings <0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Site: VAB LTM Project No.: FR0746D Phase: 02 Date: 5/24/16 Sampled By: A. Wargus

Station (Well ID): SFOC - Jw0001S Purge Method: Pump ☒ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☒ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): Geotek Geopump Purge Rate: 0.1 gpm Water Quality Meter (Make & Model) YSI 576 MPS Water Level Meter: Mer-Dipper-T

Time @ Start of Purging: 10:20 Time @ End of Purging: 10:59 Total Purging Time: 39 min. Depth of Pump or Intake Tubing: 8.5 ft BTOC

Depth to Water: 5.01 ft BTOC Total Well Depth: 12 ft BLS Screen Interval: 2.12 ft BLS Well diameter: 2 in Well Volume: 1.14 gal x3 = 3.42
Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469] 94

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity 0.0024 gal/ft \times Tubing Length 10.5 ft) + (Flow Through Cell Volume 0.1 gal) = 0.13 gallons [3 \times Equip. Vol = 0.38 gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: 5506-3W00015 - 008.5 - 2016 05-27 Time Collected: 10:55 Comments: Total antimony

1 x 250 mL, PE, HNO₃ preserved

Site: VAB LTM Project No.: FR0746D Phase: 02 Date: 5/24/16 Sampled By: A. Warzinski

Pump (Make & Model): Vertekle Deeping Purge Rate: 0.1 gpm Water Quality Meter (Make & Model) 183556 mps Water Level Meter: Heron Dipper T

Time @ Start of Purging: 9:20 Time @ End of Purging: 10:08 Total Purging Time: 48 min. Depth of Pump or Intake Tubing: 7.5 ft BTOC

Time @ Start of Purging: 9:20 Time @ End of Purging: 10:00 Total Purging Time: 40 min

Depth to Water: 3.18 ft BTOC Total Well Depth: 12 ft BLS Screen Interval: 2 - 12 ft BLS Well diameter: 2 in Well Volume: 1.44 gal $\times 3 = 4.5$ gal

Well Volume = (Total Well Depth - Depth to Water) \times Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

ES:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity 0.0026 gal/ft × Tubing Length 9.5 ft) + (Flow Through Cell Volume 0.1 gal) = 0.12 gallons [3 × Equip. Vol = 0.37 gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: SFOC-IW00045-007.5-2016 ⁰⁵⁻²⁴ Time Collected: 10:08 Comments: for total antimony

1 x 250 mL PE, HNO₃ preserved.

Site: VAB LM Project No.: FRO746D Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0006IR Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 20 to 33 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPV-IW0006IR-030.5-20100520 Time Collected: 0950 Comments: 1/0C 8260

Monitoring Well Sampling

Site: VAR LTM Project No.: FR07460 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0009I Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 28 to 33 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-1W00091 - 030.5-2016⁰⁵²⁶ Time Collected: 1010 Comments: VOC R260

Site: VAB LTM Project No.: FRO746 Phase: 02 Date: 5-25-16 Sampled By: Ben Cappenger

Station (Well ID): IW0009D Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 45 to 50 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPV-IW0009D-047.5-20160526 Time Collected: 10/5 Comments: VOC 8260

Monitor. Well Sampling

Site: VAB LTM Project No.: FRO7460 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0012I Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 35 to 40 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-IW00RI-0375-20140526 Time Collected: 1035 Comments: VOC 8260

Site: VAB LTM Project No.: FR07460 Phase: 02 Date: 5-26-16 Sampled By: Ben Capper
 Station (Well ID): IW00120 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder
 Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____
 Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC
 Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 45 to 50 ft BLS Well diameter: _____ in Well Volume: _____ gal
 Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-IW0012D - 047.5-20100526 Time Collected: 1040 Comments: VOC 8260

Site: VAB LTM Project No.: FR0746D Phase: 03 Date: 5/25/16 Sampled By: A. warinski

Station (Well ID): MUPU-JW0018D Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (Teflon SS Other) Peristaltic Centrifugal Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 2 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLP - J00018D - 052.5 - 20140525 Time Collected: 14:43 Comments: VOL

Site: VAB LTM Project No.: FRO7460 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0028 I Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (Teflon SS Other) Peristaltic Centrifugal Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: 28 to 33 ft BLS Well diameter: in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-1W0028 I-030.5 -20160526 Time Collected: 1100 Comments: VOC 8260

Site: VAB LTM Project No.: FR07468 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0029D Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 42 to 47 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPW-IW0029D - 044.5-2016 Time Collected: 0526 Comments: VOC 8260

Monitor Well Sampling

Station (Well ID): IW0046 Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Station (Well ID): IW0046 Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Station (Well ID): _____

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Time @ Start of Pumping: _____

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 35 to 45 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-IW0046-040.0-20160526 Time Collected: 10:55 Comments: VOC 8260

Monitor. _ Well Sampling

Site: VAB LTM Project No.: FRO746D Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0047 Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 35 to 45 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity | Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV- IWO047-040.0-20160525 Time Collected: 1110 Comments: VOC 8260

Site: VAB LTM Project No.: FRO746D Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): MCPV-IW0048 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 40 to 50 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPV-IW0048 ~~2016-05-05~~ 0450-2016 0526 Time Collected: 11 25

Comments: VOC 8260

Site: VAB LTM Project No.: F207460 Phase: 02 ~~03~~ Date: 5/25/16 Sampled By: A. Wenzel
 Station (Well ID): MUPU-1W0049 Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (Teflon SS Other) Peristaltic Centrifugal Bladder
 Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:
 Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC
 Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: 1 in Well Volume: gal
 Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPR-20049-043.0-2016 Time Collected: 0525 Comments: 14:34 UOL

Monitor. Well Sampling

Site: VAB LTM Project No.: FR07490 Phase: 02-03-17 Date: 5/25/16 Sampled By: A. Warren
 Station (Well ID): MUPU-FW0050 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder
 Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____
 Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC
 Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal
 Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

Time	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
	Start										

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ±0.2 °C; pH: ±0.2 standard units; specific conductance: ±5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MUPU-FW0050-045.0-20160525 Time Collected: 14:58 Comments: VOC

Site: VAB LTM Project No.: FR07460 Phase: 03 or Date: 5/25/16 Sampled By: A. Warzinski

Station (Well ID): MUPU - IW0051 Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (Teflon SS Other) Peristaltic Centrifugal Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MUPU - I00051-050.0-20160525 Time Collected: 15:10 Comments: VOL

Site: VAB LTM Project No.: FR07465 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0052 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 40 to 50 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPV-IW0052 · 045.0-20160526 Time Collected: 1155 Comments: VOC 8260

Site: VAB LTM Project No.: FRO746 Phase: 02 Date: 5-26-16 Sampled By: Ben Goppinger
 Station (Well ID): IW0053 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder
 Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____
 Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC
 Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 35 to 45 ft BLS Well diameter: _____ in Well Volume: _____ gal
 Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-IW0053-040.0-20160526 Time Collected: 1020 Comments: VOC 8260

Site: VAB LTM Project No.: FR0746 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger
 Station (Well ID): Iw0054 Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder
 Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____
 Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC
 Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 40 to 50 ft BLS Well diameter: _____ in Well Volume: _____ gal
 Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

Depth to Water: _____

Well Volume = (Total Well Depth – Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.021, 1" = 0.034, 1 1/4" = 0.051, 1 1/2" = 0.068, 2" = 0.091, 2 1/2" = 0.113, 3" = 0.136, 3 1/2" = 0.158, 4" = 0.181, 4 1/2" = 0.204, 5" = 0.226, 5 1/2" = 0.249, 6" = 0.272, 6 1/2" = 0.295, 7" = 0.318, 7 1/2" = 0.341, 8" = 0.364, 8 1/2" = 0.387, 9" = 0.410, 9 1/2" = 0.433, 10" = 0.456, 10 1/2" = 0.479, 11" = 0.502, 11 1/2" = 0.525, 12" = 0.548, 12 1/2" = 0.571, 13" = 0.594, 13 1/2" = 0.617, 14" = 0.640, 14 1/2" = 0.663, 15" = 0.686, 15 1/2" = 0.709, 16" = 0.732, 16 1/2" = 0.755, 17" = 0.778, 17 1/2" = 0.801, 18" = 0.824, 18 1/2" = 0.847, 19" = 0.870, 19 1/2" = 0.893, 20" = 0.916, 20 1/2" = 0.939, 21" = 0.962, 21 1/2" = 0.985, 22" = 1.008, 22 1/2" = 1.031, 23" = 1.054, 23 1/2" = 1.077, 24" = 1.100, 24 1/2" = 1.123, 25" = 1.146, 25 1/2" = 1.169, 26" = 1.192, 26 1/2" = 1.215, 27" = 1.238, 27 1/2" = 1.261, 28" = 1.284, 28 1/2" = 1.307, 29" = 1.330, 29 1/2" = 1.353, 30" = 1.376, 30 1/2" = 1.399, 31" = 1.422, 31 1/2" = 1.445, 32" = 1.468, 32 1/2" = 1.491, 33" = 1.514, 33 1/2" = 1.537, 34" = 1.560, 34 1/2" = 1.583, 35" = 1.606, 35 1/2" = 1.629, 36" = 1.652, 36 1/2" = 1.675, 37" = 1.698, 37 1/2" = 1.721, 38" = 1.744, 38 1/2" = 1.767, 39" = 1.790, 39 1/2" = 1.813, 40" = 1.836, 40 1/2" = 1.859, 41" = 1.882, 41 1/2" = 1.905, 42" = 1.928, 42 1/2" = 1.951, 43" = 1.974, 43 1/2" = 1.997, 44" = 2.020, 44 1/2" = 2.043, 45" = 2.066, 45 1/2" = 2.089, 46" = 2.112, 46 1/2" = 2.135, 47" = 2.158, 47 1/2" = 2.181, 48" = 2.204, 48 1/2" = 2.227, 49" = 2.250, 49 1/2" = 2.273, 50" = 2.296, 50 1/2" = 2.319, 51" = 2.342, 51 1/2" = 2.365, 52" = 2.388, 52 1/2" = 2.411, 53" = 2.434, 53 1/2" = 2.457, 54" = 2.480, 54 1/2" = 2.503, 55" = 2.526, 55 1/2" = 2.549, 56" = 2.572, 56 1/2" = 2.595, 57" = 2.618, 57 1/2" = 2.641, 58" = 2.664, 58 1/2" = 2.687, 59" = 2.710, 59 1/2" = 2.733, 60" = 2.756, 60 1/2" = 2.779, 61" = 2.802, 61 1/2" = 2.825, 62" = 2.848, 62 1/2" = 2.871, 63" = 2.894, 63 1/2" = 2.917, 64" = 2.940, 64 1/2" = 2.963, 65" = 2.986, 65 1/2" = 3.009, 66" = 3.032, 66 1/2" = 3.055, 67" = 3.078, 67 1/2" = 3.101, 68" = 3.124, 68 1/2" = 3.147, 69" = 3.170, 69 1/2" = 3.193, 70" = 3.216, 70 1/2" = 3.239, 71" = 3.262, 71 1/2" = 3.285, 72" = 3.308, 72 1/2" = 3.331, 73" = 3.354, 73 1/2" = 3.377, 74" = 3.400, 74 1/2" = 3.423, 75" = 3.446, 75 1/2" = 3.469, 76" = 3.492, 76 1/2" = 3.515, 77" = 3.538, 77 1/2" = 3.561, 78" = 3.584, 78 1/2" = 3.607, 79" = 3.630, 79 1/2" = 3.653, 80" = 3.676, 80 1/2" = 3.699, 81" = 3.722, 81 1/2" = 3.745, 82" = 3.768, 82 1/2" = 3.791, 83" = 3.814, 83 1/2" = 3.837, 84" = 3.860, 84 1/2" = 3.883, 85" = 3.906, 85 1/2" = 3.929, 86" = 3.952, 86 1/2" = 3.975, 87" = 3.998, 87 1/2" = 4.021, 88" = 4.044, 88 1/2" = 4.067, 89" = 4.090, 89 1/2" = 4.113, 90" = 4.136, 90 1/2" = 4.159, 91" = 4.182, 91 1/2" = 4.205, 92" = 4.228, 92 1/2" = 4.251, 93" = 4.274, 93 1/2" = 4.297, 94" = 4.320, 94 1/2" = 4.343, 95" = 4.366, 95 1/2" = 4.389, 96" = 4.412, 96 1/2" = 4.435, 97" = 4.458, 97 1/2" = 4.481, 98" = 4.504, 98 1/2" = 4.527, 99" = 4.550, 99 1/2" = 4.573, 100" = 4.596, 100 1/2" = 4.619, 101" = 4.642, 101 1/2" = 4.665, 102" = 4.688, 102 1/2" = 4.711, 103" = 4.734, 103 1/2" = 4.757, 104" = 4.780, 104 1/2" = 4.803, 105" = 4.826, 105 1/2" = 4.849, 106" = 4.872, 106 1/2" = 4.895, 107" = 4.918, 107 1/2" = 4.941, 108" = 4.964, 108 1/2" = 4.987, 109" = 5.010, 109 1/2" = 5.033, 110" = 5.056, 110 1/2" = 5.079, 111" = 5.102, 111 1/2" = 5.125, 112" = 5.148, 112 1/2" = 5.171, 113" = 5.194, 113 1/2" = 5.217, 114" = 5.240, 114 1/2" = 5.263, 115" = 5.286, 115 1/2" = 5.309, 116" = 5.332, 116 1/2" = 5.355, 117" = 5.378, 117 1/2" = 5.401, 118" = 5.424, 118 1/2" = 5.447, 119" = 5.470, 119 1/2" = 5.493, 120" = 5.516, 120 1/2" = 5.539, 121" = 5.562, 121 1/2" = 5.585, 122" = 5.608, 122 1/2" = 5.631, 123" = 5.654, 123 1/2" = 5.677, 124" = 5.700, 124 1/2" = 5.723, 125" = 5.746, 125 1/2" = 5.769, 126" = 5.792, 126 1/2" = 5.815, 127" = 5.838, 127 1/2" = 5.861, 128" = 5.884, 128 1/2" = 5.907, 129" = 5.930, 129 1/2" = 5.953, 130" = 5.976, 130 1/2" = 5.999, 131" = 6.022, 131 1/2" = 6.045, 132" = 6.068, 132 1/2" = 6.091, 133" = 6.114, 133 1/2" = 6.137, 134" = 6.160, 134 1/2" = 6.183, 135" = 6.206, 135 1/2" = 6.229, 136" = 6.252, 136 1/2" = 6.275, 137" = 6.298, 137 1/2" = 6.321, 138" = 6.344, 138 1/2" = 6.367, 139" = 6.390, 139 1/2" = 6.413, 140" = 6.436, 140 1/2" = 6.459, 141" = 6.482, 141 1/2" =

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLW-IW0054-245.0-20100526 Time Collected: 1120 Comments: VOC P260

Monitor Well Sampling

Site: VAB LTM Project No.: FR0746D Phase: 02 03 Ad Date: 5/25/14 Sampled By: A. Warzinski

Station (Well ID): MUPU - JWO055 Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLP-IN0055-045.0-20160525 Time Collected: 16:08 Comments: VOC

Site: VAB LTM Project No.: PRO249D Phase: 02 3 (M) Date: 5/25/16 Sampled By: A. Wazinski

Station (Well ID): MUPU-100050 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: MLPR - IWA056 - 035.0 - 2016 0525 Time Collected: 14:21 Comments: VOC

Monitor. _ Well Sampling

Site: VAD LTM Project No.: FR0746D Phase: 02 03 04 Date: 5/25/16 Sampled By: A. Warriner

Station (Well ID): POCA - m w 0004 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal
Well Volume = (Total Well Depth – Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: PLA-MW0004-010.0-2010-05-25 Time Collected: 15:48 Comments: VOL

Monitor Well Sampling

Site: VAB LTM Project No.: FR0746D Phase: 03 Date: 5/25/16 Sampled By: A. Wenzel

Station (Well ID): PCCA - MW0017 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal
Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: PCL4-MW017-020.0-20160525 Time Collected: 15:56 Comments: VOL

Monitoring Well Sampling

Site: VAB LTM Project No.: PRO 746 D Phase: 02 67 AW Date: 5/25/16 Sampled By: A. Warminster

Station (Well ID): PRBS-IN00077 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: 2 in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: PRE5-EW0007I-034.5-20160525 Time Collected: 14:07 Comments: VOC

Site: VAD LTM Project No.: FA0746 D Phase: 02 ~~03~~ Date: 5/25/16 Sampled By: A. Warriner

Station (Well ID): PRES-JW0004 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: PRES-1w0009-045.0-2016-05-25 Time Collected: 11:45 Comments: VOL

Site: VAB LTM Project No.: PR07407 Phase: 0230 Date: 5/25/16 Sampled By: A. Warriner

Station (Well ID): PRE-J00010 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: 1 in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: PRES-IW0010-045.0-20160525 Time Collected: 13:53 Comments: VOL

Monitor Well Sampling

Site: VAR LTM Project No.: FR07460 Phase: ⁰²DSM Date: 5/25/16 Sampled By: A. Warriner

Station (Well ID): SATV - 10000^{9I} Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 2 in Well Volume: _____ gal
Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: SATV-IW0009I-024.5-20160525 Time Collected: 15:28 Comments: VOL

Site: VAB LTM Project No.: FR07460 Phase: 02 D3 Date: 5/25/16 Sampled By: A. Warzinski

Station (Well ID): SATV-IN0010 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible ☐ Teflon ☐ SS ☐ Other ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 2 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: SATU-1W0010-042.0-20160525 Time Collected: 15:40 Comments: VOL

Site: VAB LTM Project No.: FR0746 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW00015R Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 2.5 to 12.5 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: WCPS-IW001SR-007.5-20100526 Time Collected: 1145 Comments: VOC P260

Site: VAB LTM Project No.: FRO7461D Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW001G Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 15 to 25 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: WCPS-IW0016-020.0-20160520 Time Collected: 1140 Comments: VOC 8260

Site: VAB LTM Project No.: FR0746D Phase: 02 Date: 5/24/16 Sampled By: A. Warrum

Station (Well ID): MUPV-SAM0001 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible (Teflon SS Other) ☒ Peristaltic Centrifugal Bladder

Pump (Make & Model): Scotch Grapump Purge Rate: 6.1 gpm Water Quality Meter (Make & Model): YSI 556 MPS Water Level Meter: Heron Dipper

Time @ Start of Purging: 11:44 Time @ End of Purging: 11:55 Total Purging Time: 11 min. Depth of Pump or Intake Tubing: 45.5 ft BTOC

Depth to Water: 3.48 ft BTOC Total Well Depth: 48 ft BLS Screen Interval: 43-48 ft BLS Well diameter: 3.14 in Well Volume: 0.89 gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.04; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity 0.0026 gal/ft \times Tubing Length 47.5 ft) + (Flow Through Cell Volume 0.1 gal) = 0.22 gallons [3 \times Equip. Vol = 0.67 gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-SAMW 0001-045.5-20160524 Time Collected: 11:55 Comments: VOCS

3 x 40 mL CG, HCl preserved.

Monitor Well Sampling

Site: VAB LTM Project No.: FR0746D Phase: 02 Date: 5/24/16 Sampled By: A. Warzasin

Station (Well ID): MLPV-SAMW003 Purge Method: Pump ☒ Bailer ☐ Pump Type: Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☒ Centrifugal ☐ Bladder

Pump (Make & Model): Geotech Geopump Purge Rate: 0.1 gpm Water Quality Meter (Make & Model): YSI 556 MPS Water Level Meter: Hydro-Dipper-T

Time @ Start of Purging: 13:05 Time @ End of Purging: 13:19 Total Purging Time: 14 min. Depth of Pump or Intake Tubing: 45.5 ft BTOC

Depth to Water: 4.03 ft BTOC Total Well Depth: 48 ft BLS Screen Interval: 42-48 ft BLS Well diameter: 3/4 in Well Volume: 0.88 gal
Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

Time	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
13:05	Start	30.65	7.79	4.717	147	2.48	-151.9	2.30	3.025	cloudy	—
13:12	0.7	26.95	6.81	6.652	48.6	3.63	-203.3	0.10	4.326	" "	—
13:15	1.0	26.98	6.82	6.646	12.7	3.62	-211.2	0.10	4.322	clear	—
13:17	1.2	27.00	6.82	6.644	11.7	3.62	-211.7	0.09	4.315	" "	—
13:19	1.4	26.89	6.83	6.642	9.04	3.62	-212.9	0.08	4.311	" "	—

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity 0.0026 gal/ft × Tubing Length 47.5 ft) + (Flow Through Cell Volume 0.1 gal) = 0.22 gallons [3 × Equip. Vol = 0.67 gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MLPV-SAMW003-045.5-20160524 Time Collected: 13:19 Comments: VOCs

3x, 40mL GB, HCl preserved

Site: VAB LTM Project No.: FR0749D Phase: 02 Date: 5/25/16 Sampled By: A. Warzinski

Station (Well ID): F56-MW0001 Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: FSG-MW0001-030.0-2010 Time Collected: 0525 10:03 Comments: VOL

Site: VAB LTM Project No.: FRO746D Phase: 03 02 AD Date: 5/25/16 Sampled By: A. Warriner

Station (Well ID): LC3906A-MW0001 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: LC3906A-MW0001-010.0-20160525 Time Collected: 11:25 Comments: VOL

Monitor Well Sampling

Monitor Well Sampling

Site: VAB LTM Project No.: FR0749D Phase: 03 OC MC Date: 5/25/16 Sampled By: A. W. Wenzel

Station (Well ID): LC3406A-MW0002 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft \times Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 \times Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: LC3406A-mw0002-010.0-20160525 Time Collected: 10:55 Comments: VOC

Monitoring Well Sampling

Site: VAB LTM Project No.: FR0749D Phase: 03 EC Date: 5/25/16 Sampled By: A. Martinez

Station (Well ID): LC3906A-MW0004 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

Time	Cumulative Purge Volume (gal)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Salinity (%)	ORP (mV)	DO (mg/L)	TDS (g/L)	Color	Comments
	Start										

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ±0.2 °C; pH: ±0.2 standard units; specific conductance: ±5.0% of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]

[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: LC3906A-MW0004-010.0-20160525 Time Collected: 10:47 Comments: Voc

Monitor Well Sampling

Monitor: Well Sampling

Site: VAB CTM Project No.: FR0746D Phase: 03 02 (2) Date: 5/25/16 Sampled By: A. Wurzinske

Station (Well ID): 663906A-mw005 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible ☐ Teflon ☐ SS ☐ Other ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft \times Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 \times Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: LL390GA-MW005-010.0-20160525 Time Collected: 11:09 Comments: VOL

Site: VAB LTM Project No.: FR0249D Phase: 03 ~~02~~ ~~AD~~ Date: 5/25/16 Sampled By: A. Wapinski

Station (Well ID): LC39A-A-0007 ^{MW} Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: LC3906A-MW0007-024.5-20160525 Time Collected: 11:03 Comments: VOL

Site: VAB LTM Project No.: FR0749D Phase: 03
02 AC Date: 5/25/16 Sampled By: A. Wenzel

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal
Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: LC390GA-MW0009-024.5-2016 0525 Time Collected: 11:18 Comments: UOL

Site: VAB LTM Project No.: FRO746 Phase: 02 ~~07~~ Date: 5-26-16 Sampled By: Ron Kent

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal
Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: MDA-FTV-FW0007I-015.0-201005261315 Time Collected: 1315 Comments: UOLG

Site: VAB LTM Project No.: FR07460 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0008I Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 10 to 20 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: ~~101~~ - IW00081 - 015.0 - 20160526 Time Collected: 1335 Comments: VOC 8260

Site: VAR LTM Project No.: FR07460 Phase: 02 Date: 5-26-16 Sampled By: Ben Cappenger

Station (Well ID): IW009Z Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible ☐ Teflon ☐ SS ☐ Other ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 10 to 20 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: FW-1W0009I - 015.0-20160926 Time Collected: 1305 Comments: VOC 8260

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Site: UAD LTM Project No.: EA074612 Phase: 02 Date: 5/26/16 Sampled By: B. C.

Station (Well ID): F W00135 Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: 1 in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: FDH - In 013I - 0.5.0 - 20100526 Time Collected: 1705 Comments: VOL

Site: VAB LTM Project No.: PR0746D Phase: 02 Date: 5/26/16 Sampled By: B. C.

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

[Tubing Inner Diameter Capacity Factors: 1/8" - 0.0000, 1/4" - 0.0020]

Sample ID: FDTL-TN0014I-015.0-20160526 Time Collected: 1400 Comments: VOL

Site: VAB LTM Project No.: FL0746D Phase: 02 Date: 5/26/16 Sampled By: B.C.

Station (Well ID): IW00155 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: _____ ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
[Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: FDIV-FW00153-010.0-2d160526 Time Collected: 1320 Comments: VOL

Site: VAB LTM Project No.: FR07460 Phase: 2 Date: 5-26-16 Sampled By: Ben Cappenger

Station (Well ID): IW0017I Purge Method: Pump ☐ Bailer ☐ Pump Type: Submersible (Teflon SS Other) Peristaltic Centrifugal Bladder

Pump (Make & Model): Purge Rate: gpm Water Quality Meter (Make & Model) Water Level Meter:

Time @ Start of Purging: Time @ End of Purging: Total Purging Time: min. Depth of Pump or Intake Tubing: ft BTOC

Depth to Water: ft BTOC Total Well Depth: ft BLS Screen Interval: ft BLS Well diameter: 1 in Well Volume: gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: FDTL - IW00171-015-0-20160526 Time Collected: 1415 Comments: VOC

Monitor Well Sampling

Monitor. Well Sampling

Site: VAB LTM Project No.: FR07460 Phase: 02 Date: 5-26-16 Sampled By: Ben Coppenger

Station (Well ID): IW0019I Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): ☐ Purge Rate: ☐ gpm Water Quality Meter (Make & Model) ☐ Water Level Meter: ☐

Time @ Start of Purging: ☐ Time @ End of Purging: ☐ Total Purging Time: ☐ min. Depth of Pump or Intake Tubing: ☐ ft BTOC

Depth to Water: ☐ ft BTOC Total Well Depth: ☐ ft BLS Screen Interval: 10 to 20 ft BLS Well diameter: ☐ in Well Volume: ☐ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: FTDL-IW0001 - 015.0 - 20160526 Time Collected: 1330 Comments: VOC 8260

Monitoring Well Sampling

Monitoring Well Sampling
Site: VAB LYM Project No.: FR0746D Phase: 02 Date: 5-27-16 Sampled By: Ben Coppenger

Station (Well ID): MW0010I Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Time @ Start of Pumping: _____ Time @ End of Pumping: _____

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 20-25 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

Notes:

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: CSES-MW0010I-022.5-20160527 Time Collected: 1100 Comments: VOCs

Monitoring Well Sampling

Site: VAB 2TM Project No.: FR0746D Phase: 02 Date: 5-27-16 Sampled By: Ben Cappenger

Station (Well ID): MW 0012I Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible ☐ Teflon ☐ SS ☐ Other ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 20-25 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

- When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
- When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
- Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
- For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
- If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: CSES-MW0012I-022.5-20160527 Time Collected: 1125 Comments: VOCs

Monitoring Well Sampling

Site: VAB 2TM Project No.: FR0746D Phase: 02 Date: 5-27-16 Sampled By: Ben Capperger

Station (Well ID): MW00125 Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 10-15 ft BLS Well diameter: _____ in Well Volume: _____ gal
Well Volume = (Total Well Depth - Depth to Water) × Well Capacity | Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469

[illegible]

Notes:

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: CSES-MW00125-012, 5-20160529 Time Collected: 1130 Comments: VOCs

Monitoring Well Sampling

Site: VAB LTM Project No.: FR0746-D Phase: 02 Date: 5-27-16 Sampled By: Ben Cappenger

Station (Well ID): NW0017S Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 7-12 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: CSES-MW00175-009, 5-20160527 Time Collected: 1115 Comments: VOCs

Monitoring Well Sampling

Site: VAB 5M Project No.: FR 07460 Phase: 02 Date: 5-27-16 Sampled By: Ben Coppenger

Station (Well ID): MW0018S Purge Method: Pump ☐ Bailer ☐ Pump Type: ___ Submersible (___ Teflon ___ SS ___ Other) ___ Peristaltic ___ Centrifugal ___ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 7-12 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) x Well Capacity [Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469]

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: $\pm 0.2^{\circ}\text{C}$; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Sample ID: C5ES-MW0018S-009.5-20160527 Time Collected: 1110 Comments: Vox

Site: VAB CTM Project No.: FR0746D Phase: 02 Date: 5-27-16 Sampled By: Ben Capper

Station (Well ID): MW0019I Purge Method: Pump ☐ Bailer ☐ Pump Type: ☐ Submersible (☐ Teflon ☐ SS ☐ Other) ☐ Peristaltic ☐ Centrifugal ☐ Bladder

Pump (Make & Model): _____ Purge Rate: _____ gpm Water Quality Meter (Make & Model) _____ Water Level Meter: _____

Time @ Start of Purging: _____ Time @ End of Purging: _____ Total Purging Time: _____ min. Depth of Pump or Intake Tubing: _____ ft BTOC

Depth to Water: _____ ft BTOC Total Well Depth: _____ ft BLS Screen Interval: 13-23 ft BLS Well diameter: _____ in Well Volume: _____ gal

Well Volume = (Total Well Depth - Depth to Water) × Well Capacity (Well Capacity Factors: 3/4" = 0.02; 1" = 0.041; 2" = 0.163; 4" = 0.653; 6" = 1.469)

[illegible]

1. When purging well with pump or intake tubing within the well screen, purge minimum of one equipment volume prior to first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart; must purge minimum of three equipment volumes prior to collecting sample.
2. When purging a well with partially submerged well screen, purge minimum of one well volume prior to collecting first stabilization parameter measurements. Take additional stabilization parameter measurements no sooner than 2 minutes apart, must purge minimum of three equipment volumes prior to collecting sample.
3. Three consecutive measurements of the five stabilization parameters listed, must be within the stated limits for sampling: temperature: ± 0.2 °C; pH: ± 0.2 standard units; specific conductance: $\pm 5.0\%$ of reading; DO is no greater than 20% saturation at field measured temperature; and turbidity ≤ 20 NTUs.
4. For high DO and/or Turbidity, check flow through cell for air bubbles – this may be causing erroneous readings. Turbidity should be verified visually and with a separate turbidity meter (if available). All attempts should be made to get the parameters within the specified limits. Verify initial calibration on water quality meters was performed correctly before using again.
5. If DO and/or turbidity stabilization parameter limits cannot be met (temp, pH, conductivity ranges remain within limits), the sampling team leader may decide whether or not to collect a sample or to continue purging five volumes of the screened interval; alternative stabilization parameter limits after purging five volumes of the screened interval are as follows: DO ± 0.2 mg/L or 10%, whichever is greater; and turbidity ± 5 NTUs or 10%, whichever is greater.

Equipment Volume = (Tubing Capacity _____ gal/ft × Tubing Length _____ ft) + (Flow Through Cell Volume _____ gal) = _____ gallons [3 × Equip. Vol = _____ gal]
 [Tubing Inner Diameter Capacity Factors: 1/8" = 0.0006; 1/4" = 0.0026]

Sample ID: CSES-MW0019I-018.0-20160527 Time Collected: 1120 Comments: VOCs

APPENDIX C

LABORATORY ANALYTICAL REPORTS

(IN ELECTRONIC COPY ONLY)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-122302-1

Client Project/Site: VAB-LTM

For:

Geosyntec Consultants, Inc.

316 South Baylen Street

Suite 201

Pensacola, Florida 32502

Attn: Crystal Towns



Authorized for release by:

6/9/2016 3:17:47 PM

Mark Swafford, Project Manager I

(850)474-1001

mark.swafford@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	11
Client Sample Results	12
QC Sample Results	108
QC Association	142
Chronicle	144
Certification Summary	153
Method Summary	154
Chain of Custody	155
Receipt Checklists	159



Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Job ID: 400-122302-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-122302-1

Comments

No additional comments.

Receipt

The samples were received on 5/28/2016 9:48 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.7° C and 0.9° C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

The sample collection date and time listed on the COC is incorrect for the following samples: C5ES-MW0012S-012.5-20160527 (400-122302-2), C5ES-MW0012I-022.5-20160527 (400-122302-3), C5ES-MW0017S-009.5-20160527 (400-122302-4), C5ES-MW0018S-009.5-20160527 (400-122302-5) and C5ES-MW0019I-018.0-20160527 (400-122302-6). The dates and times logged in are what were listed on the sample vials.

Sample PRES-IW0007-034.5-20160525 listed on the COC is incorrect. Per client the ID should be PRES-IW0007I-20160525.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0010I-022.5-20160527

Lab Sample ID: 400-122302-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	11	I	25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	1.3		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: C5ES-MW0012S-012.5-20160527

Lab Sample ID: 400-122302-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,3-Dichlorobenzene	0.99	I	1.0	0.54	ug/L	1			8260B	Total/NA
1,4-Dichlorobenzene	2.6		1.0	0.64	ug/L	1			8260B	Total/NA
Acetone	25		25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	0.75	I	1.0	0.50	ug/L	1			8260B	Total/NA
Chlorobenzene	4.1		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: C5ES-MW0012I-022.5-20160527

Lab Sample ID: 400-122302-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Carbon disulfide	0.65	I	1.0	0.50	ug/L	1			8260B	Total/NA
trans-1,2-Dichloroethene	0.65	I	1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: C5ES-MW0017S-009.5-20160527

Lab Sample ID: 400-122302-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,3-Dichlorobenzene	3.9		1.0	0.54	ug/L	1			8260B	Total/NA
1,4-Dichlorobenzene	5.6		1.0	0.64	ug/L	1			8260B	Total/NA
Chlorobenzene	0.95	I	1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: C5ES-MW0018S-009.5-20160527

Lab Sample ID: 400-122302-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	11	I	25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	0.81	I	1.0	0.50	ug/L	1			8260B	Total/NA
trans-1,2-Dichloroethene	1.7		1.0	0.50	ug/L	1			8260B	Total/NA
Vinyl chloride	23		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: C5ES-MW0019I-018.0-20160527

Lab Sample ID: 400-122302-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	1.7		1.0	0.50	ug/L	1			8260B	Total/NA
Vinyl chloride	29		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: SFOC-IW0001S-008.5-20160524

Lab Sample ID: 400-122302-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony - RA	21		2.5	0.85	ug/L	5			200.8	Total/NA

Client Sample ID: SFOC-IW0004S-007.5-20160524

Lab Sample ID: 400-122302-8

No Detections.

Client Sample ID: MLPV-IW0006IR-030.5-20160526

Lab Sample ID: 400-122302-9

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0006IR-030.5-20160526 (Continued)

Lab Sample ID: 400-122302-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	18	I	25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	0.51	I	1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0009I-030.5-20160526

Lab Sample ID: 400-122302-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	21	I	25	10	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0009D-047.5-20160526

Lab Sample ID: 400-122302-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	13	I	25	10	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0012I-037.5-20160526

Lab Sample ID: 400-122302-12

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	18	I	25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	0.57	I	1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0012D-047.5-20160526

Lab Sample ID: 400-122302-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	13	I	25	10	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0018D-052.5-20160525

Lab Sample ID: 400-122302-14

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	12	I	25	10	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0028I-030.5-20160526

Lab Sample ID: 400-122302-15

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	20	I	25	10	ug/L	1			8260B	Total/NA
Vinyl chloride	4.0		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0029D-044.5-20160526

Lab Sample ID: 400-122302-16

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	29		25	10	ug/L	1			8260B	Total/NA
Carbon disulfide	0.51	I	1.0	0.50	ug/L	1			8260B	Total/NA
Vinyl chloride	27		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0046-040.0-20160526

Lab Sample ID: 400-122302-17

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	10	I	25	10	ug/L	1			8260B	Total/NA
Vinyl chloride	8.1		1.0	0.50	ug/L	1			8260B	Total/NA

Client Sample ID: MLPV-IW0047-040.0-20160526

Lab Sample ID: 400-122302-18

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0048-045.0-20160526

Lab Sample ID: 400-122302-19

No Detections.

Client Sample ID: MLPV-IW0049-043.0-20160525

Lab Sample ID: 400-122302-20

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	1.1		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MLPV-IW0050-045.0-20160525

Lab Sample ID: 400-122302-21

No Detections.

Client Sample ID: MLPV-IW0051-050.0-20160525

Lab Sample ID: 400-122302-22

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.68	I	1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MLPV-IW0052-045.0-20160526

Lab Sample ID: 400-122302-23

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.67	I	1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	79		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MLPV-IW0053-040.0-20160526

Lab Sample ID: 400-122302-24

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.0		1.0	0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.60	I	1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	52		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MPLV-IW0054-045.0-20160526

Lab Sample ID: 400-122302-25

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	I	25	10	ug/L	1		8260B	Total/NA

Client Sample ID: MPLV-IW0055-045.0-20160525

Lab Sample ID: 400-122302-26

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	I	25	10	ug/L	1		8260B	Total/NA

Client Sample ID: MPLV-IW0056-035.0-20160525

Lab Sample ID: 400-122302-27

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.0		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: PCCA-MW0004-010.0-20160525

Lab Sample ID: 400-122302-28

No Detections.

Client Sample ID: PCCA-MW0017-020.0-20160525

Lab Sample ID: 400-122302-29

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PCCA-MW0017-020.0-20160525 (Continued)

Lab Sample ID: 400-122302-29

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	0.92	I	1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: PRES-IW0007I-034.5-20160525

Lab Sample ID: 400-122302-30

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	1.8		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: PRES-IW0009-045.0-20160525

Lab Sample ID: 400-122302-31

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	0.52	I	1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: PRES-IW0010-045.0-20160525

Lab Sample ID: 400-122302-32

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	I	25	10	ug/L	1		8260B	Total/NA

Client Sample ID: SATV-IW0009I-024.5-20160525

Lab Sample ID: 400-122302-33

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	0.98	I	1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.7		1.0	0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.7		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: SATV-IW00010-040.0-20160525

Lab Sample ID: 400-122302-34

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.72	I	1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: WCPS-IW0001SR-007.5-20160526

Lab Sample ID: 400-122302-35

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	0.62	I	1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	9.0		1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	28		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: WCPS-IW0016-020.0-20160526

Lab Sample ID: 400-122302-36

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	17	I	25	10	ug/L	1		8260B	Total/NA
Carbon disulfide	0.93	I	1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MLPV-SAMW0001-045.5-20160524

Lab Sample ID: 400-122302-37

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0001-045.5-20160524 (Continued)

Lab Sample ID: 400-122302-37

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	4.7		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MLPV-SAMW0003-045.5-20160524

Lab Sample ID: 400-122302-38

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.2		1.0	0.50	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	86		1.0	0.50	ug/L	1		8260B	Total/NA
Iodomethane	0.73	I	1.0	0.68	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.9		1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	80		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FS6-MW0001-030.0-20160525

Lab Sample ID: 400-122302-39

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.6		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FS6-MW0003-025.0-20160525

Lab Sample ID: 400-122302-40

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	I	25	10	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0007I-015.0-20160526

Lab Sample ID: 400-122302-41

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	8.0		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	3.0		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0008I-015.0-20160526

Lab Sample ID: 400-122302-42

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14	I	25	10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	16		1.0	0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.3		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	0.82	I	1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	15		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0009I-015.0-20160526

Lab Sample ID: 400-122302-43

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	I	25	10	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	15		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	5.0		1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	1.5		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0013I-015.0-20160526

Lab Sample ID: 400-122302-44

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	23		1.0	0.50	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	4.4		1.0	0.50	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0014I-015.0-20160526

Lab Sample ID: 400-122302-45

No Detections.

Client Sample ID: FDTL-IW0015S-010.0-20160526

Lab Sample ID: 400-122302-46

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.58	I	1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	15		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0017I-015.0-20160526

Lab Sample ID: 400-122302-47

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.2		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: FDTL-IW0019I-015.0-20160526

Lab Sample ID: 400-122302-48

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	1.0		1.0	0.50	ug/L	1		8260B	Total/NA
Vinyl chloride	62		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-122302-49

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122302-1	C5ES-MW0010I-022.5-20160527	Water	05/27/16 11:00	05/28/16 09:48
400-122302-2	C5ES-MW0012S-012.5-20160527	Water	05/27/16 11:30	05/28/16 09:48
400-122302-3	C5ES-MW0012I-022.5-20160527	Water	05/27/16 11:25	05/28/16 09:48
400-122302-4	C5ES-MW0017S-009.5-20160527	Water	05/27/16 11:15	05/28/16 09:48
400-122302-5	C5ES-MW0018S-009.5-20160527	Water	05/27/16 11:10	05/28/16 09:48
400-122302-6	C5ES-MW0019I-018.0-20160527	Water	05/27/16 11:20	05/28/16 09:48
400-122302-7	SFOC-IW0001S-008.5-20160524	Water	05/24/16 10:59	05/28/16 09:48
400-122302-8	SFOC-IW0004S-007.5-20160524	Water	05/24/16 10:08	05/28/16 09:48
400-122302-9	MLPV-IW0006IR-030.5-20160526	Water	05/26/16 09:50	05/28/16 09:48
400-122302-10	MLPV-IW0009I-030.5-20160526	Water	05/26/16 10:10	05/28/16 09:48
400-122302-11	MLPV-IW0009D-047.5-20160526	Water	05/26/16 10:15	05/28/16 09:48
400-122302-12	MLPV-IW0012I-037.5-20160526	Water	05/26/16 10:35	05/28/16 09:48
400-122302-13	MLPV-IW0012D-047.5-20160526	Water	05/26/16 10:40	05/28/16 09:48
400-122302-14	MLPV-IW0018D-052.5-20160525	Water	05/25/16 14:43	05/28/16 09:48
400-122302-15	MLPV-IW0028I-030.5-20160526	Water	05/26/16 11:00	05/28/16 09:48
400-122302-16	MLPV-IW0029D-044.5-20160526	Water	05/26/16 10:50	05/28/16 09:48
400-122302-17	MLPV-IW0046-040.0-20160526	Water	05/26/16 10:55	05/28/16 09:48
400-122302-18	MLPV-IW0047-040.0-20160526	Water	05/26/16 11:10	05/28/16 09:48
400-122302-19	MLPV-IW0048-045.0-20160526	Water	05/26/16 11:25	05/28/16 09:48
400-122302-20	MLPV-IW0049-043.0-20160525	Water	05/25/16 14:34	05/28/16 09:48
400-122302-21	MLPV-IW0050-045.0-20160525	Water	05/25/16 14:58	05/28/16 09:48
400-122302-22	MLPV-IW0051-050.0-20160525	Water	05/25/16 15:10	05/28/16 09:48
400-122302-23	MLPV-IW0052-045.0-20160526	Water	05/26/16 11:55	05/28/16 09:48
400-122302-24	MLPV-IW0053-040.0-20160526	Water	05/26/16 10:20	05/28/16 09:48
400-122302-25	MPLV-IW0054-045.0-20160526	Water	05/26/16 11:20	05/28/16 09:48
400-122302-26	MPLV-IW0055-045.0-20160525	Water	05/25/16 16:08	05/28/16 09:48
400-122302-27	MPLV-IW0056-035.0-20160525	Water	05/25/16 14:21	05/28/16 09:48
400-122302-28	PCCA-MW0004-010.0-20160525	Water	05/25/16 15:48	05/28/16 09:48
400-122302-29	PCCA-MW0017-020.0-20160525	Water	05/25/16 15:56	05/28/16 09:48
400-122302-30	PRES-IW0007I-034.5-20160525	Water	05/25/16 14:07	05/28/16 09:48
400-122302-31	PRES-IW0009-045.0-20160525	Water	05/25/16 11:45	05/28/16 09:48
400-122302-32	PRES-IW0010-045.0-20160525	Water	05/25/16 13:53	05/28/16 09:48
400-122302-33	SATV-IW0009I-024.5-20160525	Water	05/25/16 15:28	05/28/16 09:48
400-122302-34	SATV-IW00010-040.0-20160525	Water	05/25/16 15:40	05/28/16 09:48
400-122302-35	WCPS-IW0001SR-007.5-20160526	Water	05/26/16 11:45	05/28/16 09:48
400-122302-36	WCPS-IW0016-020.0-20160526	Water	05/26/16 11:40	05/28/16 09:48
400-122302-37	MLPV-SAMW0001-045.5-20160524	Water	05/24/16 11:55	05/28/16 09:48
400-122302-38	MLPV-SAMW0003-045.5-20160524	Water	05/24/16 13:19	05/28/16 09:48
400-122302-39	FS6-MW0001-030.0-20160525	Water	05/25/16 10:03	05/28/16 09:48
400-122302-40	FS6-MW0003-025.0-20160525	Water	05/25/16 10:24	05/28/16 09:48
400-122302-41	FDTL-IW0007I-015.0-20160526	Water	05/26/16 13:15	05/28/16 09:48
400-122302-42	FDTL-IW0008I-015.0-20160526	Water	05/26/16 13:35	05/28/16 09:48
400-122302-43	FDTL-IW0009I-015.0-20160526	Water	05/26/16 13:05	05/28/16 09:48
400-122302-44	FDTL-IW0013I-015.0-20160526	Water	05/26/16 14:05	05/28/16 09:48
400-122302-45	FDTL-IW0014I-015.0-20160526	Water	05/26/16 14:00	05/28/16 09:48
400-122302-46	FDTL-IW0015S-010.0-20160526	Water	05/26/16 13:20	05/28/16 09:48
400-122302-47	FDTL-IW0017I-015.0-20160526	Water	05/26/16 14:15	05/28/16 09:48
400-122302-48	FDTL-IW0019I-015.0-20160526	Water	05/26/16 13:30	05/28/16 09:48
400-122302-49	TRIP BLANK	Water	05/28/16 00:00	05/28/16 09:48

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0010I-022.5-20160527

Lab Sample ID: 400-122302-1

Date Collected: 05/27/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 12:50	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 12:50	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 12:50	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 12:50	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 12:50	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 12:50	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 12:50	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 12:50	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 12:50	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 12:50	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 12:50	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 12:50	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 12:50	1
Acetone	11	I	25	10	ug/L			06/04/16 12:50	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 12:50	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 12:50	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 12:50	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 12:50	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 12:50	1
Carbon disulfide	1.3		1.0	0.50	ug/L			06/04/16 12:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 12:50	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 12:50	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 12:50	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 12:50	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 12:50	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 12:50	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 12:50	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 12:50	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 12:50	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 12:50	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 12:50	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 12:50	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0010I-022.5-20160527

Lab Sample ID: 400-122302-1

Date Collected: 05/27/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 12:50	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 12:50	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 12:50	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 12:50	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 12:50	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 12:50	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 12:50	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 12:50	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 12:50	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 12:50	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 12:50	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 12:50	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 12:50	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 12:50	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 12:50	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 12:50	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118		06/04/16 12:50	1
Dibromofluoromethane	95		81 - 121		06/04/16 12:50	1
Toluene-d8 (Surr)	100		80 - 120		06/04/16 12:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0012S-012.5-20160527

Lab Sample ID: 400-122302-2

Date Collected: 05/27/16 11:30

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:15	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 13:15	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 13:15	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 13:15	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 13:15	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 13:15	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 13:15	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 13:15	1
1,3-Dichlorobenzene	0.99	I	1.0	0.54	ug/L			06/04/16 13:15	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
1,4-Dichlorobenzene	2.6		1.0	0.64	ug/L			06/04/16 13:15	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 13:15	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 13:15	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 13:15	1
Acetone	25		25	10	ug/L			06/04/16 13:15	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 13:15	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 13:15	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:15	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 13:15	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 13:15	1
Carbon disulfide	0.75	I	1.0	0.50	ug/L			06/04/16 13:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Chlorobenzene	4.1		1.0	0.50	ug/L			06/04/16 13:15	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 13:15	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 13:15	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 13:15	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 13:15	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 13:15	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 13:15	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 13:15	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 13:15	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 13:15	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 13:15	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 13:15	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 13:15	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0012S-012.5-20160527

Lab Sample ID: 400-122302-2

Date Collected: 05/27/16 11:30

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 13:15	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 13:15	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 13:15	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 13:15	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 13:15	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 13:15	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 13:15	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 13:15	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 13:15	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 13:15	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 13:15	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 13:15	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 13:15	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 13:15	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:15	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 13:15	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 13:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		78 - 118		06/04/16 13:15	1
Dibromofluoromethane	94		81 - 121		06/04/16 13:15	1
Toluene-d8 (Surr)	103		80 - 120		06/04/16 13:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0012I-022.5-20160527

Lab Sample ID: 400-122302-3

Date Collected: 05/27/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:39	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 13:39	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 13:39	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 13:39	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 13:39	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 13:39	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 13:39	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 13:39	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 13:39	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 13:39	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 13:39	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 13:39	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 13:39	1
Acetone	10	U	25	10	ug/L			06/04/16 13:39	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 13:39	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 13:39	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:39	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 13:39	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 13:39	1
Carbon disulfide	0.65	I	1.0	0.50	ug/L			06/04/16 13:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 13:39	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 13:39	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 13:39	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 13:39	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 13:39	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 13:39	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 13:39	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 13:39	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 13:39	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 13:39	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 13:39	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 13:39	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0012I-022.5-20160527

Lab Sample ID: 400-122302-3

Date Collected: 05/27/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 13:39	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 13:39	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 13:39	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 13:39	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 13:39	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 13:39	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 13:39	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 13:39	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 13:39	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 13:39	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 13:39	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 13:39	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 13:39	1
trans-1,2-Dichloroethene	0.65	I	1.0	0.50	ug/L			06/04/16 13:39	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 13:39	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 13:39	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 13:39	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 13:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118		06/04/16 13:39	1
Dibromofluoromethane	96		81 - 121		06/04/16 13:39	1
Toluene-d8 (Surr)	102		80 - 120		06/04/16 13:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0017S-009.5-20160527

Lab Sample ID: 400-122302-4

Date Collected: 05/27/16 11:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 08:47	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 08:47	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 08:47	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 08:47	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 08:47	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 08:47	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 08:47	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 08:47	1
1,3-Dichlorobenzene	3.9		1.0	0.54	ug/L			06/05/16 08:47	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
1,4-Dichlorobenzene	5.6		1.0	0.64	ug/L			06/05/16 08:47	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 08:47	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 08:47	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 08:47	1
Acetone	10	U	25	10	ug/L			06/05/16 08:47	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 08:47	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 08:47	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 08:47	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 08:47	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 08:47	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Chlorobenzene	0.95	I	1.0	0.50	ug/L			06/05/16 08:47	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 08:47	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 08:47	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 08:47	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 08:47	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 08:47	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 08:47	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 08:47	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 08:47	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 08:47	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 08:47	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 08:47	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 08:47	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0017S-009.5-20160527

Lab Sample ID: 400-122302-4

Date Collected: 05/27/16 11:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 08:47	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 08:47	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 08:47	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 08:47	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 08:47	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 08:47	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 08:47	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 08:47	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 08:47	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 08:47	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 08:47	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 08:47	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 08:47	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 08:47	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 08:47	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 08:47	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 08:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118		06/05/16 08:47	1
Dibromofluoromethane	99		81 - 121		06/05/16 08:47	1
Toluene-d8 (Surr)	98		80 - 120		06/05/16 08:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0018S-009.5-20160527

Lab Sample ID: 400-122302-5

Date Collected: 05/27/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:27	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 14:27	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 14:27	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 14:27	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 14:27	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 14:27	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 14:27	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 14:27	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 14:27	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 14:27	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 14:27	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 14:27	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 14:27	1
Acetone	11	I	25	10	ug/L			06/04/16 14:27	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 14:27	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 14:27	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:27	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 14:27	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 14:27	1
Carbon disulfide	0.81	I	1.0	0.50	ug/L			06/04/16 14:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 14:27	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 14:27	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 14:27	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 14:27	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 14:27	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 14:27	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 14:27	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 14:27	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 14:27	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 14:27	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 14:27	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 14:27	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0018S-009.5-20160527

Lab Sample ID: 400-122302-5

Date Collected: 05/27/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 14:27	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 14:27	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 14:27	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 14:27	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 14:27	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 14:27	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 14:27	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 14:27	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 14:27	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 14:27	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 14:27	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 14:27	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 14:27	1
trans-1,2-Dichloroethene	1.7		1.0	0.50	ug/L			06/04/16 14:27	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 14:27	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:27	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:27	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 14:27	1
Vinyl chloride	23		1.0	0.50	ug/L			06/04/16 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/04/16 14:27	1
Dibromofluoromethane	95		81 - 121		06/04/16 14:27	1
Toluene-d8 (Surr)	101		80 - 120		06/04/16 14:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0019I-018.0-20160527

Lab Sample ID: 400-122302-6

Date Collected: 05/27/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:51	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 14:51	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 14:51	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 14:51	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 14:51	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 14:51	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 14:51	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 14:51	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 14:51	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 14:51	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 14:51	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 14:51	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 14:51	1
Acetone	10	U	25	10	ug/L			06/04/16 14:51	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 14:51	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 14:51	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:51	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 14:51	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 14:51	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 14:51	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 14:51	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 14:51	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 14:51	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 14:51	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 14:51	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 14:51	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 14:51	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 14:51	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 14:51	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 14:51	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 14:51	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0019I-018.0-20160527

Lab Sample ID: 400-122302-6

Date Collected: 05/27/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 14:51	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 14:51	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 14:51	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 14:51	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 14:51	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 14:51	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 14:51	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 14:51	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 14:51	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 14:51	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 14:51	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 14:51	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 14:51	1
trans-1,2-Dichloroethene	1.7		1.0	0.50	ug/L			06/04/16 14:51	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 14:51	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 14:51	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 14:51	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 14:51	1
Vinyl chloride	29		1.0	0.50	ug/L			06/04/16 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/04/16 14:51	1
Dibromofluoromethane	97		81 - 121		06/04/16 14:51	1
Toluene-d8 (Surr)	100		80 - 120		06/04/16 14:51	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SFOC-IW0001S-008.5-20160524
Date Collected: 05/24/16 10:59
Date Received: 05/28/16 09:48

Lab Sample ID: 400-122302-7
Matrix: Water

Method: 200.8 - Metals (ICP/MS) - RA

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	21		2.5	0.85	ug/L		06/03/16 08:45	06/06/16 17:05	5

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SFOC-IW0004S-007.5-20160524
Date Collected: 05/24/16 10:08
Date Received: 05/28/16 09:48

Lab Sample ID: 400-122302-8
Matrix: Water

Method: 200.8 - Metals (ICP/MS) - RA

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	U	2.5	0.85	ug/L	-	06/03/16 08:45	06/06/16 17:27	5

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0006IR-030.5-20160526

Lab Sample ID: 400-122302-9

Date Collected: 05/26/16 09:50

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:17	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 15:17	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 15:17	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 15:17	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 15:17	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 15:17	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 15:17	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 15:17	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 15:17	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 15:17	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 15:17	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 15:17	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 15:17	1
Acetone	18	I	25	10	ug/L			06/04/16 15:17	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 15:17	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 15:17	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:17	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 15:17	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 15:17	1
Carbon disulfide	0.51	I	1.0	0.50	ug/L			06/04/16 15:17	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 15:17	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 15:17	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 15:17	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 15:17	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 15:17	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 15:17	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 15:17	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 15:17	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 15:17	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 15:17	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 15:17	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 15:17	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0006IR-030.5-20160526

Lab Sample ID: 400-122302-9

Date Collected: 05/26/16 09:50

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 15:17	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 15:17	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 15:17	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 15:17	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 15:17	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 15:17	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 15:17	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 15:17	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 15:17	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 15:17	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 15:17	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 15:17	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 15:17	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 15:17	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:17	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 15:17	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/04/16 15:17	1
Dibromofluoromethane	95		81 - 121		06/04/16 15:17	1
Toluene-d8 (Surr)	100		80 - 120		06/04/16 15:17	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0009I-030.5-20160526

Lab Sample ID: 400-122302-10

Date Collected: 05/26/16 10:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:43	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 15:43	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 15:43	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 15:43	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 15:43	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 15:43	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 15:43	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 15:43	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 15:43	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 15:43	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 15:43	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 15:43	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 15:43	1
Acetone	21	I	25	10	ug/L			06/04/16 15:43	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 15:43	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 15:43	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:43	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 15:43	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 15:43	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 15:43	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 15:43	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 15:43	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 15:43	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 15:43	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 15:43	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 15:43	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 15:43	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 15:43	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 15:43	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 15:43	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 15:43	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0009I-030.5-20160526

Lab Sample ID: 400-122302-10

Date Collected: 05/26/16 10:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 15:43	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 15:43	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 15:43	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 15:43	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 15:43	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 15:43	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 15:43	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 15:43	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 15:43	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 15:43	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 15:43	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 15:43	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 15:43	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 15:43	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 15:43	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 15:43	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118					06/04/16 15:43	1
Dibromofluoromethane	96		81 - 121					06/04/16 15:43	1
Toluene-d8 (Surr)	100		80 - 120					06/04/16 15:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0009D-047.5-20160526

Lab Sample ID: 400-122302-11

Date Collected: 05/26/16 10:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:09	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 16:09	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 16:09	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 16:09	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 16:09	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 16:09	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 16:09	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 16:09	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 16:09	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 16:09	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 16:09	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 16:09	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 16:09	1
Acetone	13	I	25	10	ug/L			06/04/16 16:09	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 16:09	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 16:09	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:09	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 16:09	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 16:09	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 16:09	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 16:09	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 16:09	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 16:09	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 16:09	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 16:09	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 16:09	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 16:09	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 16:09	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 16:09	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 16:09	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 16:09	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0009D-047.5-20160526

Lab Sample ID: 400-122302-11

Date Collected: 05/26/16 10:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 16:09	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 16:09	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 16:09	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 16:09	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 16:09	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 16:09	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 16:09	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 16:09	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 16:09	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 16:09	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 16:09	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 16:09	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 16:09	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 16:09	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:09	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 16:09	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 16:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/04/16 16:09	1
Dibromofluoromethane	98		81 - 121		06/04/16 16:09	1
Toluene-d8 (Surr)	100		80 - 120		06/04/16 16:09	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0012I-037.5-20160526

Lab Sample ID: 400-122302-12

Date Collected: 05/26/16 10:35

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:36	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 16:36	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 16:36	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 16:36	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 16:36	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 16:36	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 16:36	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 16:36	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 16:36	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 16:36	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 16:36	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 16:36	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 16:36	1
Acetone	18	I	25	10	ug/L			06/04/16 16:36	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 16:36	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 16:36	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:36	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 16:36	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 16:36	1
Carbon disulfide	0.57	I	1.0	0.50	ug/L			06/04/16 16:36	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 16:36	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 16:36	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 16:36	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 16:36	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 16:36	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 16:36	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 16:36	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 16:36	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 16:36	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 16:36	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 16:36	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 16:36	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0012I-037.5-20160526

Lab Sample ID: 400-122302-12

Date Collected: 05/26/16 10:35

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 16:36	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 16:36	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 16:36	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 16:36	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 16:36	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 16:36	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 16:36	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 16:36	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 16:36	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 16:36	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 16:36	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 16:36	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 16:36	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 16:36	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 16:36	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 16:36	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/04/16 16:36	1
Dibromofluoromethane	96		81 - 121		06/04/16 16:36	1
Toluene-d8 (Surr)	99		80 - 120		06/04/16 16:36	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0012D-047.5-20160526

Lab Sample ID: 400-122302-13

Date Collected: 05/26/16 10:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:01	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 17:01	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:01	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 17:01	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:01	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:01	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 17:01	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 17:01	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:01	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 17:01	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 17:01	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 17:01	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 17:01	1
Acetone	13	I	25	10	ug/L			06/04/16 17:01	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 17:01	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:01	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:01	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 17:01	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 17:01	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 17:01	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 17:01	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 17:01	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:01	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 17:01	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 17:01	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 17:01	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 17:01	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 17:01	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 17:01	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 17:01	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 17:01	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0012D-047.5-20160526

Lab Sample ID: 400-122302-13

Date Collected: 05/26/16 10:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 17:01	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 17:01	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 17:01	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 17:01	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 17:01	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 17:01	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 17:01	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 17:01	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:01	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 17:01	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 17:01	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 17:01	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 17:01	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:01	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:01	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 17:01	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/04/16 17:01	1
Dibromofluoromethane	96		81 - 121		06/04/16 17:01	1
Toluene-d8 (Surr)	98		80 - 120		06/04/16 17:01	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0018D-052.5-20160525

Lab Sample ID: 400-122302-14

Date Collected: 05/25/16 14:43

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:28	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 17:28	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:28	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 17:28	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:28	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:28	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 17:28	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 17:28	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:28	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 17:28	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 17:28	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 17:28	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 17:28	1
Acetone	12	I	25	10	ug/L			06/04/16 17:28	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 17:28	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:28	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:28	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 17:28	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 17:28	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 17:28	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 17:28	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 17:28	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:28	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 17:28	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 17:28	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 17:28	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 17:28	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 17:28	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 17:28	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 17:28	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 17:28	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0018D-052.5-20160525

Lab Sample ID: 400-122302-14

Date Collected: 05/25/16 14:43

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 17:28	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 17:28	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 17:28	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 17:28	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 17:28	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 17:28	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 17:28	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 17:28	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:28	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 17:28	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 17:28	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 17:28	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 17:28	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:28	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:28	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 17:28	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/04/16 17:28	1
Dibromofluoromethane	97		81 - 121		06/04/16 17:28	1
Toluene-d8 (Surr)	98		80 - 120		06/04/16 17:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0028I-030.5-20160526

Lab Sample ID: 400-122302-15

Date Collected: 05/26/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:54	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 17:54	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:54	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 17:54	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:54	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 17:54	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 17:54	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 17:54	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:54	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 17:54	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 17:54	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 17:54	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 17:54	1
Acetone	20	I	25	10	ug/L			06/04/16 17:54	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 17:54	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 17:54	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:54	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 17:54	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 17:54	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 17:54	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 17:54	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 17:54	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:54	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 17:54	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 17:54	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 17:54	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 17:54	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 17:54	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 17:54	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 17:54	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 17:54	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0028I-030.5-20160526

Lab Sample ID: 400-122302-15

Date Collected: 05/26/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 17:54	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 17:54	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 17:54	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 17:54	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 17:54	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 17:54	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 17:54	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 17:54	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 17:54	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 17:54	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 17:54	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 17:54	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 17:54	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 17:54	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 17:54	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 17:54	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 17:54	1
Vinyl chloride	4.0		1.0	0.50	ug/L			06/04/16 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/04/16 17:54	1
Dibromofluoromethane	95		81 - 121		06/04/16 17:54	1
Toluene-d8 (Surr)	99		80 - 120		06/04/16 17:54	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0029D-044.5-20160526

Lab Sample ID: 400-122302-16

Date Collected: 05/26/16 10:50

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:20	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 18:20	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 18:20	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 18:20	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 18:20	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 18:20	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 18:20	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 18:20	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 18:20	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 18:20	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 18:20	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 18:20	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 18:20	1
Acetone	29		25	10	ug/L			06/04/16 18:20	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 18:20	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 18:20	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:20	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 18:20	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 18:20	1
Carbon disulfide	0.51	I	1.0	0.50	ug/L			06/04/16 18:20	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 18:20	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 18:20	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 18:20	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 18:20	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 18:20	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 18:20	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 18:20	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 18:20	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 18:20	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 18:20	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 18:20	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 18:20	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0029D-044.5-20160526

Lab Sample ID: 400-122302-16

Date Collected: 05/26/16 10:50

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 18:20	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 18:20	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 18:20	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 18:20	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 18:20	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 18:20	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 18:20	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 18:20	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 18:20	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 18:20	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 18:20	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 18:20	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 18:20	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 18:20	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:20	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:20	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 18:20	1
Vinyl chloride	27		1.0	0.50	ug/L			06/04/16 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/04/16 18:20	1
Dibromofluoromethane	96		81 - 121		06/04/16 18:20	1
Toluene-d8 (Surr)	98		80 - 120		06/04/16 18:20	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0046-040.0-20160526

Lab Sample ID: 400-122302-17

Date Collected: 05/26/16 10:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:46	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 18:46	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 18:46	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 18:46	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 18:46	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 18:46	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 18:46	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 18:46	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 18:46	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 18:46	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 18:46	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 18:46	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 18:46	1
Acetone	10	I	25	10	ug/L			06/04/16 18:46	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 18:46	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 18:46	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:46	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 18:46	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 18:46	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 18:46	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 18:46	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 18:46	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 18:46	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 18:46	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 18:46	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 18:46	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 18:46	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 18:46	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 18:46	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 18:46	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 18:46	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0046-040.0-20160526

Lab Sample ID: 400-122302-17

Date Collected: 05/26/16 10:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 18:46	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 18:46	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 18:46	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 18:46	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 18:46	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 18:46	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 18:46	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 18:46	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 18:46	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 18:46	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 18:46	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 18:46	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 18:46	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 18:46	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 18:46	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 18:46	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 18:46	1
Vinyl chloride	8.1		1.0	0.50	ug/L			06/04/16 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/04/16 18:46	1
Dibromofluoromethane	98		81 - 121		06/04/16 18:46	1
Toluene-d8 (Surr)	98		80 - 120		06/04/16 18:46	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0047-040.0-20160526

Lab Sample ID: 400-122302-18

Date Collected: 05/26/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:11	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 19:11	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 19:11	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 19:11	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 19:11	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 19:11	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 19:11	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 19:11	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 19:11	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 19:11	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 19:11	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 19:11	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 19:11	1
Acetone	10	U	25	10	ug/L			06/04/16 19:11	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 19:11	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 19:11	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:11	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 19:11	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 19:11	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 19:11	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 19:11	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 19:11	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 19:11	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 19:11	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 19:11	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 19:11	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 19:11	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 19:11	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 19:11	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 19:11	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 19:11	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0047-040.0-20160526

Lab Sample ID: 400-122302-18

Date Collected: 05/26/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 19:11	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 19:11	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 19:11	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 19:11	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 19:11	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 19:11	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 19:11	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 19:11	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 19:11	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 19:11	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 19:11	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 19:11	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 19:11	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 19:11	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:11	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 19:11	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118					06/04/16 19:11	1
Dibromofluoromethane	98		81 - 121					06/04/16 19:11	1
Toluene-d8 (Surr)	99		80 - 120					06/04/16 19:11	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0048-045.0-20160526

Lab Sample ID: 400-122302-19

Date Collected: 05/26/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:37	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 19:37	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 19:37	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 19:37	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 19:37	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 19:37	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 19:37	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 19:37	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 19:37	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 19:37	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 19:37	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 19:37	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 19:37	1
Acetone	10	U	25	10	ug/L			06/04/16 19:37	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 19:37	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 19:37	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:37	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 19:37	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 19:37	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 19:37	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 19:37	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 19:37	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 19:37	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 19:37	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 19:37	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 19:37	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 19:37	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 19:37	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 19:37	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 19:37	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 19:37	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0048-045.0-20160526

Lab Sample ID: 400-122302-19

Date Collected: 05/26/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 19:37	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 19:37	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 19:37	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 19:37	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 19:37	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 19:37	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 19:37	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 19:37	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 19:37	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 19:37	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 19:37	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 19:37	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 19:37	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 19:37	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 19:37	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 19:37	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/04/16 19:37	1
Dibromofluoromethane	97		81 - 121		06/04/16 19:37	1
Toluene-d8 (Surr)	100		80 - 120		06/04/16 19:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0049-043.0-20160525

Lab Sample ID: 400-122302-20

Date Collected: 05/25/16 14:34

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:25	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 10:25	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 10:25	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 10:25	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 10:25	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 10:25	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 10:25	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 10:25	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 10:25	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 10:25	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 10:25	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 10:25	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 10:25	1
Acetone	24	I	25	10	ug/L			06/05/16 10:25	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 10:25	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 10:25	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:25	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 10:25	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 10:25	1
Carbon disulfide	1.1		1.0	0.50	ug/L			06/05/16 10:25	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 10:25	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 10:25	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 10:25	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 10:25	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 10:25	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 10:25	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 10:25	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 10:25	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 10:25	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 10:25	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 10:25	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 10:25	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0049-043.0-20160525

Lab Sample ID: 400-122302-20

Date Collected: 05/25/16 14:34

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 10:25	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 10:25	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 10:25	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 10:25	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 10:25	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 10:25	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 10:25	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 10:25	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 10:25	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 10:25	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 10:25	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 10:25	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 10:25	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 10:25	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:25	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 10:25	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 10:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		78 - 118		06/05/16 10:25	1
Dibromofluoromethane	102		81 - 121		06/05/16 10:25	1
Toluene-d8 (Surr)	96		80 - 120		06/05/16 10:25	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0050-045.0-20160525

Lab Sample ID: 400-122302-21

Date Collected: 05/25/16 14:58

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:50	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 10:50	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 10:50	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 10:50	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 10:50	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 10:50	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 10:50	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 10:50	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 10:50	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 10:50	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 10:50	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 10:50	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 10:50	1
Acetone	10	U	25	10	ug/L			06/05/16 10:50	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 10:50	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 10:50	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:50	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 10:50	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 10:50	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 10:50	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 10:50	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 10:50	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 10:50	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 10:50	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 10:50	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 10:50	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 10:50	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 10:50	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 10:50	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 10:50	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 10:50	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0050-045.0-20160525

Lab Sample ID: 400-122302-21

Date Collected: 05/25/16 14:58

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 10:50	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 10:50	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 10:50	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 10:50	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 10:50	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 10:50	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 10:50	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 10:50	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 10:50	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 10:50	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 10:50	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 10:50	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 10:50	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 10:50	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 10:50	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 10:50	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 10:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/05/16 10:50	1
Dibromofluoromethane	100		81 - 121		06/05/16 10:50	1
Toluene-d8 (Surr)	98		80 - 120		06/05/16 10:50	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0051-050.0-20160525

Lab Sample ID: 400-122302-22

Date Collected: 05/25/16 15:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:15	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 11:15	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 11:15	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 11:15	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 11:15	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 11:15	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 11:15	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 11:15	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 11:15	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 11:15	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 11:15	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 11:15	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 11:15	1
Acetone	10	U	25	10	ug/L			06/05/16 11:15	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 11:15	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 11:15	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:15	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 11:15	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 11:15	1
Carbon disulfide	0.68	I	1.0	0.50	ug/L			06/05/16 11:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 11:15	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 11:15	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 11:15	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 11:15	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 11:15	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 11:15	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 11:15	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 11:15	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 11:15	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 11:15	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 11:15	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 11:15	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0051-050.0-20160525

Lab Sample ID: 400-122302-22

Date Collected: 05/25/16 15:10

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 11:15	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 11:15	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 11:15	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 11:15	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 11:15	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 11:15	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 11:15	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 11:15	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 11:15	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 11:15	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 11:15	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 11:15	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 11:15	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 11:15	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:15	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 11:15	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/05/16 11:15	1
Dibromofluoromethane	101		81 - 121		06/05/16 11:15	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 11:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0052-045.0-20160526

Lab Sample ID: 400-122302-23

Date Collected: 05/26/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:39	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 11:39	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 11:39	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 11:39	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 11:39	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 11:39	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 11:39	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 11:39	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 11:39	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 11:39	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 11:39	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 11:39	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 11:39	1
Acetone	10	U	25	10	ug/L			06/05/16 11:39	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 11:39	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 11:39	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:39	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 11:39	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 11:39	1
Carbon disulfide	0.67	I	1.0	0.50	ug/L			06/05/16 11:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 11:39	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 11:39	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 11:39	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 11:39	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 11:39	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 11:39	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 11:39	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 11:39	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 11:39	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 11:39	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 11:39	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 11:39	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0052-045.0-20160526

Lab Sample ID: 400-122302-23

Date Collected: 05/26/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 11:39	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 11:39	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 11:39	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 11:39	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 11:39	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 11:39	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 11:39	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 11:39	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 11:39	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 11:39	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 11:39	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 11:39	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 11:39	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 11:39	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 11:39	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 11:39	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 11:39	1
Vinyl chloride	79		1.0	0.50	ug/L			06/05/16 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/05/16 11:39	1
Dibromofluoromethane	100		81 - 121		06/05/16 11:39	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 11:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0053-040.0-20160526

Lab Sample ID: 400-122302-24

Date Collected: 05/26/16 10:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:03	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 12:03	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 12:03	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 12:03	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 12:03	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 12:03	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 12:03	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 12:03	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 12:03	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 12:03	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 12:03	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 12:03	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 12:03	1
Acetone	10	U	25	10	ug/L			06/05/16 12:03	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 12:03	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 12:03	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:03	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 12:03	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 12:03	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 12:03	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 12:03	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 12:03	1
cis-1,2-Dichloroethene	4.0		1.0	0.50	ug/L			06/05/16 12:03	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 12:03	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 12:03	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 12:03	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 12:03	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 12:03	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 12:03	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 12:03	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 12:03	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 12:03	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0053-040.0-20160526

Lab Sample ID: 400-122302-24

Date Collected: 05/26/16 10:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 12:03	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 12:03	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 12:03	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 12:03	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 12:03	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 12:03	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 12:03	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 12:03	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 12:03	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 12:03	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 12:03	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 12:03	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 12:03	1
trans-1,2-Dichloroethene	0.60	I	1.0	0.50	ug/L			06/05/16 12:03	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 12:03	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:03	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:03	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 12:03	1
Vinyl chloride	52		1.0	0.50	ug/L			06/05/16 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 12:03	1
Dibromofluoromethane	101		81 - 121		06/05/16 12:03	1
Toluene-d8 (Surr)	95		80 - 120		06/05/16 12:03	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0054-045.0-20160526

Lab Sample ID: 400-122302-25

Date Collected: 05/26/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:29	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 12:29	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 12:29	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 12:29	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 12:29	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 12:29	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 12:29	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 12:29	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 12:29	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 12:29	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 12:29	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 12:29	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 12:29	1
Acetone	15	I	25	10	ug/L			06/05/16 12:29	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 12:29	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 12:29	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:29	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 12:29	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 12:29	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 12:29	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 12:29	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 12:29	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 12:29	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 12:29	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 12:29	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 12:29	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 12:29	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 12:29	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 12:29	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 12:29	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 12:29	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0054-045.0-20160526

Lab Sample ID: 400-122302-25

Date Collected: 05/26/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 12:29	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 12:29	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 12:29	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 12:29	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 12:29	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 12:29	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 12:29	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 12:29	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 12:29	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 12:29	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 12:29	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 12:29	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 12:29	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 12:29	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 12:29	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 12:29	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 12:29	1
Dibromofluoromethane	101		81 - 121		06/05/16 12:29	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 12:29	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0055-045.0-20160525

Lab Sample ID: 400-122302-26

Date Collected: 05/25/16 16:08

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:34	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/07/16 14:34	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/07/16 14:34	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/07/16 14:34	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/07/16 14:34	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/07/16 14:34	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/07/16 14:34	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/07/16 14:34	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/07/16 14:34	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/07/16 14:34	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/07/16 14:34	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/07/16 14:34	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/07/16 14:34	1
Acetone	20	I	25	10	ug/L			06/07/16 14:34	1
Benzene	0.38	U	1.0	0.38	ug/L			06/07/16 14:34	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/07/16 14:34	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:34	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/07/16 14:34	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/07/16 14:34	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/07/16 14:34	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/07/16 14:34	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/07/16 14:34	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/07/16 14:34	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/07/16 14:34	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/07/16 14:34	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/07/16 14:34	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/07/16 14:34	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/07/16 14:34	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/07/16 14:34	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/07/16 14:34	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/07/16 14:34	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0055-045.0-20160525

Lab Sample ID: 400-122302-26

Date Collected: 05/25/16 16:08

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/07/16 14:34	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/07/16 14:34	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/07/16 14:34	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/07/16 14:34	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/07/16 14:34	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/07/16 14:34	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/07/16 14:34	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/07/16 14:34	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/07/16 14:34	1
Styrene	1.0	U	1.0	1.0	ug/L			06/07/16 14:34	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/07/16 14:34	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/07/16 14:34	1
Toluene	0.70	U	1.0	0.70	ug/L			06/07/16 14:34	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/07/16 14:34	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:34	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/07/16 14:34	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/07/16 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/07/16 14:34	1
Dibromofluoromethane	106		81 - 121		06/07/16 14:34	1
Toluene-d8 (Surr)	92		80 - 120		06/07/16 14:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0056-035.0-20160525

Lab Sample ID: 400-122302-27

Date Collected: 05/25/16 14:21

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:21	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 13:21	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 13:21	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 13:21	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 13:21	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 13:21	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 13:21	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 13:21	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 13:21	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 13:21	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 13:21	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 13:21	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 13:21	1
Acetone	10	U	25	10	ug/L			06/05/16 13:21	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 13:21	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 13:21	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:21	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 13:21	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 13:21	1
Carbon disulfide	1.0		1.0	0.50	ug/L			06/05/16 13:21	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 13:21	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 13:21	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 13:21	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 13:21	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 13:21	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 13:21	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 13:21	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 13:21	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 13:21	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 13:21	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 13:21	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 13:21	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0056-035.0-20160525

Lab Sample ID: 400-122302-27

Date Collected: 05/25/16 14:21

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 13:21	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 13:21	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 13:21	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 13:21	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 13:21	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 13:21	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 13:21	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 13:21	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 13:21	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 13:21	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 13:21	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 13:21	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 13:21	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 13:21	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:21	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 13:21	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/05/16 13:21	1
Dibromofluoromethane	101		81 - 121		06/05/16 13:21	1
Toluene-d8 (Surr)	93		80 - 120		06/05/16 13:21	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PCCA-MW0004-010.0-20160525

Lab Sample ID: 400-122302-28

Date Collected: 05/25/16 15:48

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:47	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 13:47	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 13:47	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 13:47	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 13:47	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 13:47	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 13:47	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 13:47	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 13:47	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 13:47	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 13:47	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 13:47	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 13:47	1
Acetone	10	U	25	10	ug/L			06/05/16 13:47	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 13:47	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 13:47	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:47	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 13:47	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 13:47	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 13:47	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 13:47	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 13:47	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 13:47	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 13:47	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 13:47	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 13:47	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 13:47	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 13:47	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 13:47	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 13:47	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 13:47	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PCCA-MW0004-010.0-20160525

Lab Sample ID: 400-122302-28

Date Collected: 05/25/16 15:48

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 13:47	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 13:47	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 13:47	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 13:47	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 13:47	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 13:47	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 13:47	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 13:47	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 13:47	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 13:47	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 13:47	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 13:47	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 13:47	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 13:47	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 13:47	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 13:47	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 13:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 13:47	1
Dibromofluoromethane	101		81 - 121		06/05/16 13:47	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 13:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PCCA-MW0017-020.0-20160525

Lab Sample ID: 400-122302-29

Date Collected: 05/25/16 15:56

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:13	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 14:13	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 14:13	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 14:13	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 14:13	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 14:13	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 14:13	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 14:13	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 14:13	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 14:13	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 14:13	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 14:13	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 14:13	1
Acetone	14	I	25	10	ug/L			06/05/16 14:13	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 14:13	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 14:13	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:13	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 14:13	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 14:13	1
Carbon disulfide	0.92	I	1.0	0.50	ug/L			06/05/16 14:13	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 14:13	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 14:13	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 14:13	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 14:13	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 14:13	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 14:13	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 14:13	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 14:13	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 14:13	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 14:13	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 14:13	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 14:13	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PCCA-MW0017-020.0-20160525

Lab Sample ID: 400-122302-29

Date Collected: 05/25/16 15:56

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 14:13	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 14:13	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 14:13	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 14:13	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 14:13	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 14:13	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 14:13	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 14:13	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 14:13	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 14:13	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 14:13	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 14:13	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 14:13	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 14:13	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:13	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 14:13	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/05/16 14:13	1
Dibromofluoromethane	100		81 - 121		06/05/16 14:13	1
Toluene-d8 (Surr)	93		80 - 120		06/05/16 14:13	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0007I-034.5-20160525

Lab Sample ID: 400-122302-30

Date Collected: 05/25/16 14:07

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:39	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 14:39	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 14:39	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 14:39	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 14:39	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 14:39	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 14:39	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 14:39	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 14:39	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 14:39	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 14:39	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 14:39	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 14:39	1
Acetone	16	I	25	10	ug/L			06/05/16 14:39	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 14:39	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 14:39	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:39	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 14:39	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 14:39	1
Carbon disulfide	1.8		1.0	0.50	ug/L			06/05/16 14:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 14:39	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 14:39	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 14:39	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 14:39	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 14:39	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 14:39	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 14:39	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 14:39	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 14:39	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 14:39	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 14:39	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 14:39	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0007I-034.5-20160525

Lab Sample ID: 400-122302-30

Date Collected: 05/25/16 14:07

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 14:39	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 14:39	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 14:39	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 14:39	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 14:39	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 14:39	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 14:39	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 14:39	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 14:39	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 14:39	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 14:39	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 14:39	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 14:39	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 14:39	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 14:39	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 14:39	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		78 - 118		06/05/16 14:39	1
Dibromofluoromethane	103		81 - 121		06/05/16 14:39	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 14:39	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0009-045.0-20160525

Lab Sample ID: 400-122302-31

Date Collected: 05/25/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:05	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 15:05	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:05	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 15:05	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:05	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:05	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 15:05	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 15:05	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:05	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 15:05	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 15:05	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 15:05	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 15:05	1
Acetone	11	I	25	10	ug/L			06/05/16 15:05	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 15:05	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:05	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:05	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 15:05	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 15:05	1
Carbon disulfide	0.52	I	1.0	0.50	ug/L			06/05/16 15:05	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 15:05	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 15:05	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 15:05	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:05	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 15:05	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 15:05	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 15:05	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 15:05	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 15:05	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 15:05	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 15:05	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 15:05	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0009-045.0-20160525

Lab Sample ID: 400-122302-31

Date Collected: 05/25/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 15:05	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 15:05	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 15:05	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 15:05	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 15:05	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 15:05	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 15:05	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 15:05	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:05	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 15:05	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 15:05	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 15:05	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 15:05	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:05	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:05	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 15:05	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 15:05	1
Dibromofluoromethane	101		81 - 121		06/05/16 15:05	1
Toluene-d8 (Surr)	92		80 - 120		06/05/16 15:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0010-045.0-20160525

Lab Sample ID: 400-122302-32

Date Collected: 05/25/16 13:53

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:31	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 15:31	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:31	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 15:31	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:31	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:31	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 15:31	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 15:31	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:31	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 15:31	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 15:31	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 15:31	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 15:31	1
Acetone	11	I	25	10	ug/L			06/05/16 15:31	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 15:31	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:31	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:31	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 15:31	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 15:31	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 15:31	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 15:31	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 15:31	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:31	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 15:31	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 15:31	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 15:31	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 15:31	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 15:31	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 15:31	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 15:31	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 15:31	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0010-045.0-20160525

Lab Sample ID: 400-122302-32

Date Collected: 05/25/16 13:53

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 15:31	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 15:31	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 15:31	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 15:31	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 15:31	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 15:31	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 15:31	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 15:31	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:31	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 15:31	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 15:31	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 15:31	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 15:31	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:31	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:31	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 15:31	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/05/16 15:31	1
Dibromofluoromethane	101		81 - 121		06/05/16 15:31	1
Toluene-d8 (Surr)	93		80 - 120		06/05/16 15:31	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SATV-IW0009I-024.5-20160525

Lab Sample ID: 400-122302-33

Date Collected: 05/25/16 15:28

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:57	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 15:57	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:57	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 15:57	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:57	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 15:57	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 15:57	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 15:57	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:57	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 15:57	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 15:57	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 15:57	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 15:57	1
Acetone	11	I	25	10	ug/L			06/05/16 15:57	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 15:57	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 15:57	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:57	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 15:57	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 15:57	1
Carbon disulfide	0.98	I	1.0	0.50	ug/L			06/05/16 15:57	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 15:57	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 15:57	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 15:57	1
cis-1,2-Dichloroethene	2.7		1.0	0.50	ug/L			06/05/16 15:57	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:57	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 15:57	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 15:57	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 15:57	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 15:57	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 15:57	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 15:57	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 15:57	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 15:57	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SATV-IW0009I-024.5-20160525

Lab Sample ID: 400-122302-33

Date Collected: 05/25/16 15:28

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 15:57	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 15:57	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 15:57	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 15:57	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 15:57	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 15:57	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 15:57	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 15:57	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 15:57	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 15:57	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 15:57	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 15:57	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 15:57	1
trans-1,2-Dichloroethene	2.7		1.0	0.50	ug/L			06/05/16 15:57	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 15:57	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 15:57	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 15:57	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 15:57	1
Dibromofluoromethane	104		81 - 121		06/05/16 15:57	1
Toluene-d8 (Surr)	94		80 - 120		06/05/16 15:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SATV-IW00010-040.0-20160525

Lab Sample ID: 400-122302-34

Date Collected: 05/25/16 15:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:23	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 16:23	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 16:23	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 16:23	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 16:23	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 16:23	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 16:23	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 16:23	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 16:23	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 16:23	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 16:23	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 16:23	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 16:23	1
Acetone	10	U	25	10	ug/L			06/05/16 16:23	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 16:23	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 16:23	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:23	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 16:23	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 16:23	1
Carbon disulfide	0.72	I	1.0	0.50	ug/L			06/05/16 16:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 16:23	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 16:23	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 16:23	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 16:23	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 16:23	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 16:23	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 16:23	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 16:23	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 16:23	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 16:23	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 16:23	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 16:23	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SATV-IW00010-040.0-20160525

Lab Sample ID: 400-122302-34

Date Collected: 05/25/16 15:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 16:23	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 16:23	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 16:23	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 16:23	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 16:23	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 16:23	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 16:23	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 16:23	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 16:23	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 16:23	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 16:23	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 16:23	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 16:23	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 16:23	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:23	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 16:23	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/05/16 16:23	1
Dibromofluoromethane	102		81 - 121		06/05/16 16:23	1
Toluene-d8 (Surr)	93		80 - 120		06/05/16 16:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: WCP5-IW0001SR-007.5-20160526

Lab Sample ID: 400-122302-35

Date Collected: 05/26/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:49	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 16:49	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 16:49	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 16:49	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 16:49	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 16:49	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 16:49	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 16:49	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 16:49	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 16:49	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 16:49	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 16:49	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 16:49	1
Acetone	12	I	25	10	ug/L			06/05/16 16:49	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 16:49	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 16:49	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:49	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 16:49	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 16:49	1
Carbon disulfide	0.62	I	1.0	0.50	ug/L			06/05/16 16:49	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 16:49	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 16:49	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 16:49	1
cis-1,2-Dichloroethene	9.0		1.0	0.50	ug/L			06/05/16 16:49	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 16:49	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 16:49	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 16:49	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 16:49	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 16:49	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 16:49	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 16:49	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 16:49	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 16:49	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: WCPS-IW0001SR-007.5-20160526

Lab Sample ID: 400-122302-35

Date Collected: 05/26/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 16:49	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 16:49	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 16:49	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 16:49	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 16:49	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 16:49	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 16:49	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 16:49	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 16:49	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 16:49	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 16:49	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 16:49	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 16:49	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 16:49	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 16:49	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 16:49	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 16:49	1
Vinyl chloride	28		1.0	0.50	ug/L			06/05/16 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/05/16 16:49	1
Dibromofluoromethane	103		81 - 121		06/05/16 16:49	1
Toluene-d8 (Surr)	91		80 - 120		06/05/16 16:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: WCPs-IW0016-020.0-20160526

Lab Sample ID: 400-122302-36

Date Collected: 05/26/16 11:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 17:15	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 17:15	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 17:15	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 17:15	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 17:15	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 17:15	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 17:15	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 17:15	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 17:15	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 17:15	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 17:15	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 17:15	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 17:15	1
Acetone	17	I	25	10	ug/L			06/05/16 17:15	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 17:15	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 17:15	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 17:15	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 17:15	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 17:15	1
Carbon disulfide	0.93	I	1.0	0.50	ug/L			06/05/16 17:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 17:15	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 17:15	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 17:15	1
cis-1,2-Dichloroethene	6.0		1.0	0.50	ug/L			06/05/16 17:15	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 17:15	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 17:15	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 17:15	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 17:15	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 17:15	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 17:15	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 17:15	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 17:15	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 17:15	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: WCPS-IW0016-020.0-20160526

Lab Sample ID: 400-122302-36

Date Collected: 05/26/16 11:40

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 17:15	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 17:15	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 17:15	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 17:15	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 17:15	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 17:15	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 17:15	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 17:15	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 17:15	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 17:15	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 17:15	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 17:15	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 17:15	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 17:15	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 17:15	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 17:15	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/05/16 17:15	1
Dibromofluoromethane	102		81 - 121		06/05/16 17:15	1
Toluene-d8 (Surr)	90		80 - 120		06/05/16 17:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0001-045.5-20160524

Lab Sample ID: 400-122302-37

Date Collected: 05/24/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:49	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 10:49	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 10:49	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 10:49	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 10:49	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 10:49	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 10:49	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 10:49	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 10:49	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 10:49	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 10:49	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 10:49	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 10:49	1
Acetone	10	U	25	10	ug/L			06/04/16 10:49	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 10:49	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 10:49	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:49	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 10:49	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 10:49	1
Carbon disulfide	4.7		1.0	0.50	ug/L			06/04/16 10:49	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 10:49	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 10:49	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 10:49	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 10:49	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 10:49	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 10:49	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 10:49	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 10:49	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 10:49	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 10:49	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 10:49	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 10:49	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0001-045.5-20160524

Lab Sample ID: 400-122302-37

Date Collected: 05/24/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 10:49	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 10:49	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 10:49	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 10:49	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 10:49	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 10:49	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 10:49	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 10:49	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 10:49	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 10:49	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 10:49	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 10:49	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 10:49	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 10:49	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:49	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 10:49	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 10:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118		06/04/16 10:49	1
Dibromofluoromethane	94		81 - 121		06/04/16 10:49	1
Toluene-d8 (Surr)	102		80 - 120		06/04/16 10:49	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0003-045.5-20160524

Lab Sample ID: 400-122302-38

Date Collected: 05/24/16 13:19

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 11:14	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 11:14	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 11:14	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 11:14	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 11:14	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 11:14	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 11:14	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 11:14	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 11:14	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 11:14	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 11:14	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 11:14	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 11:14	1
Acetone	10	U	25	10	ug/L			06/04/16 11:14	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 11:14	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 11:14	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 11:14	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 11:14	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 11:14	1
Carbon disulfide	1.2		1.0	0.50	ug/L			06/04/16 11:14	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 11:14	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 11:14	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 11:14	1
cis-1,2-Dichloroethene	86		1.0	0.50	ug/L			06/04/16 11:14	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 11:14	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 11:14	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 11:14	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 11:14	1
Iodomethane	0.73	I	1.0	0.68	ug/L			06/04/16 11:14	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 11:14	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 11:14	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 11:14	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 11:14	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0003-045.5-20160524

Lab Sample ID: 400-122302-38

Date Collected: 05/24/16 13:19

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 11:14	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 11:14	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 11:14	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 11:14	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 11:14	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 11:14	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 11:14	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 11:14	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 11:14	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 11:14	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 11:14	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 11:14	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 11:14	1
trans-1,2-Dichloroethene	3.9		1.0	0.50	ug/L			06/04/16 11:14	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 11:14	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 11:14	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 11:14	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 11:14	1
Vinyl chloride	80		1.0	0.50	ug/L			06/04/16 11:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		78 - 118		06/04/16 11:14	1
Dibromofluoromethane	93		81 - 121		06/04/16 11:14	1
Toluene-d8 (Surr)	102		80 - 120		06/04/16 11:14	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FS6-MW0001-030.0-20160525

Lab Sample ID: 400-122302-39

Date Collected: 05/25/16 10:03

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 16:48	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 16:48	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 16:48	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 16:48	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 16:48	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 16:48	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 16:48	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 16:48	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 16:48	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 16:48	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 16:48	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 16:48	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 16:48	1
Acetone	10	U	25	10	ug/L			06/06/16 16:48	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 16:48	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 16:48	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 16:48	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 16:48	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 16:48	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 16:48	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 16:48	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 16:48	1
cis-1,2-Dichloroethene	2.6		1.0	0.50	ug/L			06/06/16 16:48	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 16:48	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 16:48	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 16:48	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 16:48	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 16:48	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 16:48	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 16:48	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 16:48	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 16:48	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FS6-MW0001-030.0-20160525

Lab Sample ID: 400-122302-39

Date Collected: 05/25/16 10:03

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 16:48	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 16:48	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 16:48	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 16:48	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 16:48	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 16:48	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 16:48	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 16:48	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 16:48	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 16:48	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 16:48	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 16:48	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 16:48	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 16:48	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 16:48	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 16:48	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118					06/06/16 16:48	1
Dibromofluoromethane	109		81 - 121					06/06/16 16:48	1
Toluene-d8 (Surr)	93		80 - 120					06/06/16 16:48	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FS6-MW0003-025.0-20160525

Lab Sample ID: 400-122302-40

Date Collected: 05/25/16 10:24

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:15	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 17:15	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 17:15	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 17:15	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 17:15	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 17:15	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 17:15	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 17:15	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 17:15	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 17:15	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 17:15	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 17:15	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 17:15	1
Acetone	12	I	25	10	ug/L			06/06/16 17:15	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 17:15	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 17:15	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:15	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 17:15	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 17:15	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 17:15	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 17:15	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 17:15	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 17:15	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 17:15	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 17:15	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 17:15	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 17:15	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 17:15	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 17:15	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 17:15	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 17:15	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FS6-MW0003-025.0-20160525

Lab Sample ID: 400-122302-40

Date Collected: 05/25/16 10:24

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 17:15	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 17:15	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 17:15	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 17:15	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 17:15	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 17:15	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 17:15	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 17:15	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 17:15	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 17:15	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 17:15	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 17:15	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 17:15	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 17:15	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:15	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 17:15	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/06/16 17:15	1
Dibromofluoromethane	107		81 - 121		06/06/16 17:15	1
Toluene-d8 (Surr)	94		80 - 120		06/06/16 17:15	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0007I-015.0-20160526

Lab Sample ID: 400-122302-41

Date Collected: 05/26/16 13:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:41	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 17:41	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 17:41	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 17:41	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 17:41	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 17:41	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 17:41	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 17:41	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 17:41	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 17:41	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 17:41	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 17:41	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 17:41	1
Acetone	10	U	25	10	ug/L			06/06/16 17:41	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 17:41	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 17:41	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:41	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 17:41	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 17:41	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 17:41	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 17:41	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 17:41	1
cis-1,2-Dichloroethene	8.0		1.0	0.50	ug/L			06/06/16 17:41	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 17:41	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 17:41	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 17:41	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 17:41	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 17:41	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 17:41	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 17:41	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 17:41	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 17:41	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0007I-015.0-20160526

Lab Sample ID: 400-122302-41

Date Collected: 05/26/16 13:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 17:41	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 17:41	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 17:41	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 17:41	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 17:41	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 17:41	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 17:41	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 17:41	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 17:41	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 17:41	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 17:41	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 17:41	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 17:41	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 17:41	1
Trichloroethene	3.0		1.0	0.50	ug/L			06/06/16 17:41	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 17:41	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 17:41	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/06/16 17:41	1
Dibromofluoromethane	109		81 - 121		06/06/16 17:41	1
Toluene-d8 (Surr)	92		80 - 120		06/06/16 17:41	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0008I-015.0-20160526

Lab Sample ID: 400-122302-42

Date Collected: 05/26/16 13:35

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:08	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 18:08	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 18:08	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 18:08	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 18:08	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 18:08	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 18:08	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 18:08	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 18:08	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 18:08	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 18:08	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 18:08	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 18:08	1
Acetone	14	I	25	10	ug/L			06/06/16 18:08	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 18:08	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 18:08	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:08	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 18:08	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 18:08	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 18:08	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 18:08	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 18:08	1
cis-1,2-Dichloroethene	16		1.0	0.50	ug/L			06/06/16 18:08	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 18:08	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 18:08	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 18:08	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 18:08	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 18:08	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 18:08	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 18:08	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 18:08	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 18:08	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 18:08	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0008I-015.0-20160526

Lab Sample ID: 400-122302-42

Date Collected: 05/26/16 13:35

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 18:08	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 18:08	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 18:08	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 18:08	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 18:08	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 18:08	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 18:08	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 18:08	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 18:08	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 18:08	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 18:08	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 18:08	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 18:08	1
trans-1,2-Dichloroethene	1.3		1.0	0.50	ug/L			06/06/16 18:08	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 18:08	1
Trichloroethene	0.82	I	1.0	0.50	ug/L			06/06/16 18:08	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:08	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 18:08	1
Vinyl chloride	15		1.0	0.50	ug/L			06/06/16 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118		06/06/16 18:08	1
Dibromofluoromethane	106		81 - 121		06/06/16 18:08	1
Toluene-d8 (Surr)	92		80 - 120		06/06/16 18:08	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0009I-015.0-20160526

Lab Sample ID: 400-122302-43

Date Collected: 05/26/16 13:05

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:34	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 18:34	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 18:34	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 18:34	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 18:34	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 18:34	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 18:34	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 18:34	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 18:34	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 18:34	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 18:34	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 18:34	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 18:34	1
Acetone	13	I	25	10	ug/L			06/06/16 18:34	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 18:34	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 18:34	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:34	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 18:34	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 18:34	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 18:34	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 18:34	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 18:34	1
cis-1,2-Dichloroethene	15		1.0	0.50	ug/L			06/06/16 18:34	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 18:34	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 18:34	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 18:34	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 18:34	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 18:34	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 18:34	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 18:34	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 18:34	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 18:34	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0009I-015.0-20160526

Lab Sample ID: 400-122302-43

Date Collected: 05/26/16 13:05

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 18:34	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 18:34	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 18:34	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 18:34	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 18:34	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 18:34	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 18:34	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 18:34	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 18:34	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 18:34	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 18:34	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 18:34	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 18:34	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 18:34	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 18:34	1
Trichloroethene	5.0		1.0	0.50	ug/L			06/06/16 18:34	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 18:34	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 18:34	1
Vinyl chloride	1.5		1.0	0.50	ug/L			06/06/16 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/06/16 18:34	1
Dibromofluoromethane	109		81 - 121		06/06/16 18:34	1
Toluene-d8 (Surr)	94		80 - 120		06/06/16 18:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0013I-015.0-20160526

Lab Sample ID: 400-122302-44

Date Collected: 05/26/16 14:05

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:00	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 19:00	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 19:00	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 19:00	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 19:00	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 19:00	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 19:00	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 19:00	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 19:00	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 19:00	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 19:00	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 19:00	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 19:00	1
Acetone	10	U	25	10	ug/L			06/06/16 19:00	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 19:00	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 19:00	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:00	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 19:00	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 19:00	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 19:00	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 19:00	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 19:00	1
cis-1,2-Dichloroethene	23		1.0	0.50	ug/L			06/06/16 19:00	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 19:00	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 19:00	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 19:00	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 19:00	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 19:00	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 19:00	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 19:00	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 19:00	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 19:00	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0013I-015.0-20160526

Lab Sample ID: 400-122302-44

Date Collected: 05/26/16 14:05

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 19:00	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 19:00	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 19:00	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 19:00	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 19:00	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 19:00	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 19:00	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 19:00	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 19:00	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 19:00	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 19:00	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 19:00	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 19:00	1
trans-1,2-Dichloroethene	4.4		1.0	0.50	ug/L			06/06/16 19:00	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 19:00	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:00	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 19:00	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/06/16 19:00	1
Dibromofluoromethane	108		81 - 121		06/06/16 19:00	1
Toluene-d8 (Surr)	92		80 - 120		06/06/16 19:00	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0014I-015.0-20160526

Lab Sample ID: 400-122302-45

Date Collected: 05/26/16 14:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 19:26	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 19:26	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 19:26	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 19:26	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 19:26	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 19:26	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 19:26	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 19:26	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 19:26	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 19:26	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 19:26	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 19:26	1
Acetone	10	U	25	10	ug/L			06/06/16 19:26	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 19:26	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 19:26	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:26	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 19:26	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 19:26	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 19:26	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 19:26	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 19:26	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 19:26	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 19:26	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 19:26	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 19:26	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 19:26	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 19:26	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 19:26	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 19:26	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 19:26	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0014I-015.0-20160526

Lab Sample ID: 400-122302-45

Date Collected: 05/26/16 14:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 19:26	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 19:26	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 19:26	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 19:26	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 19:26	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 19:26	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 19:26	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 19:26	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 19:26	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 19:26	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 19:26	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 19:26	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 19:26	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 19:26	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 19:26	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 19:26	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		78 - 118		06/06/16 19:26	1
Dibromofluoromethane	106		81 - 121		06/06/16 19:26	1
Toluene-d8 (Surr)	93		80 - 120		06/06/16 19:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0015S-010.0-20160526

Lab Sample ID: 400-122302-46

Date Collected: 05/26/16 13:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:36	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 10:36	1
1,1-Dichloroethane	0.58	I	1.0	0.50	ug/L			06/06/16 10:36	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 10:36	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 10:36	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 10:36	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 10:36	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 10:36	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 10:36	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 10:36	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 10:36	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 10:36	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 10:36	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 10:36	1
Acetone	10	U	25	10	ug/L			06/06/16 10:36	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 10:36	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 10:36	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:36	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 10:36	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 10:36	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 10:36	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 10:36	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 10:36	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 10:36	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 10:36	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 10:36	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 10:36	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 10:36	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 10:36	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 10:36	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 10:36	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 10:36	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0015S-010.0-20160526

Lab Sample ID: 400-122302-46

Date Collected: 05/26/16 13:20

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 10:36	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 10:36	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 10:36	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 10:36	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 10:36	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 10:36	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 10:36	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 10:36	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 10:36	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 10:36	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 10:36	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 10:36	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 10:36	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 10:36	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:36	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:36	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 10:36	1
Vinyl chloride	15		1.0	0.50	ug/L			06/06/16 10:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/06/16 10:36	1
Dibromofluoromethane	97		81 - 121		06/06/16 10:36	1
Toluene-d8 (Surr)	101		80 - 120		06/06/16 10:36	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0017I-015.0-20160526

Lab Sample ID: 400-122302-47

Date Collected: 05/26/16 14:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:02	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 11:02	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 11:02	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 11:02	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 11:02	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 11:02	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 11:02	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 11:02	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 11:02	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 11:02	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 11:02	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 11:02	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 11:02	1
Acetone	10	U	25	10	ug/L			06/06/16 11:02	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 11:02	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 11:02	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:02	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 11:02	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 11:02	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 11:02	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 11:02	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 11:02	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 11:02	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 11:02	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 11:02	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 11:02	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 11:02	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 11:02	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 11:02	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 11:02	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 11:02	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0017I-015.0-20160526

Lab Sample ID: 400-122302-47

Date Collected: 05/26/16 14:15

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 11:02	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 11:02	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 11:02	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 11:02	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 11:02	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 11:02	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 11:02	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 11:02	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 11:02	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 11:02	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 11:02	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 11:02	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 11:02	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 11:02	1
Trichloroethene	4.2		1.0	0.50	ug/L			06/06/16 11:02	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:02	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 11:02	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		78 - 118		06/06/16 11:02	1
Dibromofluoromethane	97		81 - 121		06/06/16 11:02	1
Toluene-d8 (Surr)	101		80 - 120		06/06/16 11:02	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0019I-015.0-20160526

Lab Sample ID: 400-122302-48

Date Collected: 05/26/16 13:30

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 11:26	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 11:26	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 11:26	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 11:26	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 11:26	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 11:26	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 11:26	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 11:26	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 11:26	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 11:26	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 11:26	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 11:26	1
Acetone	10	U	25	10	ug/L			06/06/16 11:26	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 11:26	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 11:26	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:26	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 11:26	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 11:26	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 11:26	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 11:26	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 11:26	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 11:26	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 11:26	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 11:26	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 11:26	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 11:26	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 11:26	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 11:26	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 11:26	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 11:26	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0019I-015.0-20160526

Lab Sample ID: 400-122302-48

Date Collected: 05/26/16 13:30

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 11:26	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 11:26	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 11:26	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 11:26	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 11:26	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 11:26	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 11:26	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 11:26	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 11:26	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 11:26	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 11:26	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 11:26	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 11:26	1
trans-1,2-Dichloroethene	1.0		1.0	0.50	ug/L			06/06/16 11:26	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 11:26	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 11:26	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 11:26	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 11:26	1
Vinyl chloride	62		1.0	0.50	ug/L			06/06/16 11:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/06/16 11:26	1
Dibromofluoromethane	97		81 - 121		06/06/16 11:26	1
Toluene-d8 (Surr)	102		80 - 120		06/06/16 11:26	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-122302-49

Date Collected: 05/28/16 00:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:12	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 10:12	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 10:12	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 10:12	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 10:12	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 10:12	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 10:12	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 10:12	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 10:12	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 10:12	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 10:12	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 10:12	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 10:12	1
Acetone	10	U	25	10	ug/L			06/06/16 10:12	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 10:12	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 10:12	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:12	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 10:12	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 10:12	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 10:12	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 10:12	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 10:12	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 10:12	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 10:12	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 10:12	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 10:12	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 10:12	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 10:12	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 10:12	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 10:12	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 10:12	1

TestAmerica Pensacola

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-122302-49

Date Collected: 05/28/16 00:00

Matrix: Water

Date Received: 05/28/16 09:48

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 10:12	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 10:12	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 10:12	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 10:12	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 10:12	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 10:12	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 10:12	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 10:12	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 10:12	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 10:12	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 10:12	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 10:12	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 10:12	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 10:12	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 10:12	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 10:12	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 10:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/06/16 10:12	1
Dibromofluoromethane	97		81 - 121		06/06/16 10:12	1
Toluene-d8 (Surr)	100		80 - 120		06/06/16 10:12	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-308608/4

Matrix: Water

Analysis Batch: 308608

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:25	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/04/16 10:25	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/04/16 10:25	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/04/16 10:25	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/04/16 10:25	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/04/16 10:25	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/04/16 10:25	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/04/16 10:25	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 10:25	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/04/16 10:25	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/04/16 10:25	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/04/16 10:25	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/04/16 10:25	1
Acetone	10	U	25	10	ug/L			06/04/16 10:25	1
Benzene	0.38	U	1.0	0.38	ug/L			06/04/16 10:25	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/04/16 10:25	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:25	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/04/16 10:25	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/04/16 10:25	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/04/16 10:25	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/04/16 10:25	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/04/16 10:25	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 10:25	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/04/16 10:25	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/04/16 10:25	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/04/16 10:25	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/04/16 10:25	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/04/16 10:25	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/04/16 10:25	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/04/16 10:25	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308608/4

Matrix: Water

Analysis Batch: 308608

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/04/16 10:25	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/04/16 10:25	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/04/16 10:25	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/04/16 10:25	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/04/16 10:25	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/04/16 10:25	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/04/16 10:25	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/04/16 10:25	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/04/16 10:25	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/04/16 10:25	1
Styrene	1.0	U	1.0	1.0	ug/L			06/04/16 10:25	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/04/16 10:25	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/04/16 10:25	1
Toluene	0.70	U	1.0	0.70	ug/L			06/04/16 10:25	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/04/16 10:25	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/04/16 10:25	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/04/16 10:25	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/04/16 10:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		78 - 118		06/04/16 10:25	1
Dibromofluoromethane	95		81 - 121		06/04/16 10:25	1
Toluene-d8 (Surr)	103		80 - 120		06/04/16 10:25	1

Lab Sample ID: LCS 400-308608/1002

Matrix: Water

Analysis Batch: 308608

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/L		105	67 - 131
1,1,1-Trichloroethane	50.0	46.6		ug/L		93	68 - 130
1,1,2,2-Tetrachloroethane	50.0	55.7		ug/L		111	70 - 131
1,1,2-Trichloroethane	50.0	55.5		ug/L		111	70 - 130
1,1-Dichloroethane	50.0	43.5		ug/L		87	70 - 130
1,1-Dichloroethene	50.0	51.1		ug/L		102	63 - 134
1,1-Dichloropropene	50.0	43.1		ug/L		86	70 - 130
1,2,3-Trichlorobenzene	50.0	49.5		ug/L		99	60 - 138
1,2,3-Trichloropropane	50.0	54.1		ug/L		108	70 - 130
1,2,4-Trichlorobenzene	50.0	51.5		ug/L		103	60 - 140
1,2,4-Trimethylbenzene	50.0	51.9		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/L		100	54 - 135
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	67 - 130
1,2-Dichloroethane	50.0	43.4		ug/L		87	69 - 130
1,2-Dichloropropane	50.0	43.0		ug/L		86	70 - 130
1,3,5-Trimethylbenzene	50.0	53.9		ug/L		108	69 - 130
1,3-Dichlorobenzene	50.0	52.2		ug/L		104	70 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308608/1002

Matrix: Water

Analysis Batch: 308608

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	50.0	51.0		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	52.9		ug/L		106	70 - 130
2,2-Dichloropropane	50.0	44.2		ug/L		88	52 - 135
2-Chlorotoluene	50.0	51.8		ug/L		104	70 - 130
2-Hexanone	200	203		ug/L		102	65 - 137
4-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
Acetone	200	191		ug/L		95	43 - 160
Benzene	50.0	46.8		ug/L		94	70 - 130
Bromobenzene	50.0	53.0		ug/L		106	70 - 132
Bromochloromethane	50.0	45.8		ug/L		92	70 - 130
Bromodichloromethane	50.0	46.9		ug/L		94	67 - 133
Bromoform	50.0	52.5		ug/L		105	57 - 140
Bromomethane	50.0	39.8		ug/L		80	10 - 160
Carbon disulfide	50.0	46.3		ug/L		93	61 - 137
Carbon tetrachloride	50.0	45.8		ug/L		92	61 - 137
Chlorobenzene	50.0	53.5		ug/L		107	70 - 130
Chloroethane	50.0	47.1		ug/L		94	55 - 141
Chloroform	50.0	44.9		ug/L		90	69 - 130
Chloromethane	50.0	42.9		ug/L		86	58 - 137
cis-1,2-Dichloroethene	50.0	44.3		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	45.7		ug/L		91	69 - 132
Dibromochloromethane	50.0	55.6		ug/L		111	67 - 135
Dibromomethane	50.0	45.2		ug/L		90	70 - 130
Dichlorodifluoromethane	50.0	48.6		ug/L		97	41 - 146
Ethylbenzene	50.0	54.1		ug/L		108	70 - 130
Ethylene Dibromide	50.0	55.2		ug/L		110	70 - 130
Hexachlorobutadiene	50.0	47.4		ug/L		95	53 - 140
Iodomethane	50.0	45.1		ug/L		90	27 - 159
Isopropyl ether	50.0	46.3		ug/L		93	64 - 132
Isopropylbenzene	50.0	56.5		ug/L		113	70 - 130
Methyl Ethyl Ketone	200	191		ug/L		95	61 - 145
methyl isobutyl ketone	200	175		ug/L		88	69 - 138
Methyl tert-butyl ether	50.0	45.3		ug/L		91	66 - 130
Methylene Chloride	50.0	49.5		ug/L		99	66 - 135
m-Xylene & p-Xylene	50.0	53.8		ug/L		108	70 - 130
Naphthalene	50.0	51.9		ug/L		104	47 - 149
n-Butylbenzene	50.0	51.9		ug/L		104	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Xylene	50.0	55.5		ug/L		111	70 - 130
p-Cymene	50.0	49.2		ug/L		98	65 - 130
sec-Butylbenzene	50.0	53.1		ug/L		106	66 - 130
Styrene	50.0	53.8		ug/L		108	70 - 130
tert-Butylbenzene	50.0	52.4		ug/L		105	64 - 139
Tetrachloroethene	50.0	53.8		ug/L		108	65 - 130
Toluene	50.0	53.2		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	47.3		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	51.1		ug/L		102	63 - 130
Trichloroethene	50.0	46.8		ug/L		94	70 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308608/1002

Matrix: Water

Analysis Batch: 308608

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	50.0	51.9		ug/L		104	65 - 138
Vinyl acetate	100	94.2		ug/L		94	26 - 160
Vinyl chloride	50.0	44.5		ug/L		89	59 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		78 - 118
Dibromofluoromethane	94		81 - 121
Toluene-d8 (Surr)	110		80 - 120

Lab Sample ID: 400-122302-1 MS

Matrix: Water

Analysis Batch: 308608

Client Sample ID: C5ES-MW0010I-022.5-20160527

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.52	U	50.0	53.7		ug/L		107	59 - 137
1,1,1-Trichloroethane	0.50	U	50.0	49.4		ug/L		99	57 - 142
1,1,2,2-Tetrachloroethane	0.50	U	50.0	60.2		ug/L		120	66 - 135
1,1,2-Trichloroethane	0.50	U	50.0	55.4		ug/L		111	66 - 131
1,1-Dichloroethane	0.50	U	50.0	46.0		ug/L		92	61 - 144
1,1-Dichloroethene	0.50	U	50.0	53.9		ug/L		108	54 - 147
1,1-Dichloropropene	0.50	U	50.0	45.6		ug/L		91	65 - 136
1,2,3-Trichlorobenzene	0.70	U	50.0	56.1		ug/L		112	43 - 145
1,2,3-Trichloropropane	0.84	U	50.0	57.2		ug/L		114	65 - 133
1,2,4-Trichlorobenzene	0.82	U	50.0	58.0		ug/L		116	39 - 148
1,2,4-Trimethylbenzene	0.82	U	50.0	59.2		ug/L		118	50 - 139
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	49.8		ug/L		100	45 - 135
1,2-Dichlorobenzene	0.50	U	50.0	58.1		ug/L		116	52 - 137
1,2-Dichloroethane	0.50	U	50.0	45.1		ug/L		90	60 - 141
1,2-Dichloropropane	0.50	U	50.0	44.9		ug/L		90	66 - 137
1,3,5-Trimethylbenzene	0.56	U	50.0	62.5		ug/L		125	52 - 135
1,3-Dichlorobenzene	0.54	U	50.0	59.9		ug/L		120	54 - 135
1,3-Dichloropropane	0.50	U	50.0	50.8		ug/L		102	66 - 133
1,4-Dichlorobenzene	0.64	U	50.0	60.7		ug/L		121	53 - 135
2,2-Dichloropropane	0.50	U	50.0	46.8		ug/L		94	42 - 144
2-Chlorotoluene	0.57	U	50.0	60.8		ug/L		122	53 - 134
2-Hexanone	3.1	U	200	183		ug/L		92	65 - 140
4-Chlorotoluene	0.56	U	50.0	59.7		ug/L		119	54 - 133
Acetone	11	I	200	163		ug/L		76	43 - 160
Benzene	0.38	U	50.0	49.6		ug/L		99	56 - 142
Bromobenzene	0.54	U	50.0	59.8		ug/L		120	59 - 136
Bromochloromethane	0.52	U	50.0	48.5		ug/L		97	64 - 140
Bromodichloromethane	0.50	U	50.0	48.8		ug/L		98	59 - 143
Bromoform	0.71	U	50.0	50.5		ug/L		101	50 - 140
Bromomethane	0.98	U	50.0	26.7		ug/L		53	10 - 160
Carbon disulfide	1.3		50.0	50.8		ug/L		99	48 - 152
Carbon tetrachloride	0.50	U	50.0	47.7		ug/L		95	55 - 145
Chlorobenzene	0.50	U	50.0	55.7		ug/L		111	64 - 130
Chloroethane	0.76	U	50.0	49.0		ug/L		98	50 - 151

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-1 MS

Matrix: Water

Analysis Batch: 308608

Client Sample ID: C5ES-MW0010I-022.5-20160527

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	0.60	U	50.0	47.4		ug/L		95	60 - 141
Chloromethane	0.83	U	50.0	38.3		ug/L		77	49 - 148
cis-1,2-Dichloroethene	0.50	U	50.0	47.2		ug/L		94	59 - 143
cis-1,3-Dichloropropene	0.50	U	50.0	47.4		ug/L		95	57 - 140
Dibromochloromethane	0.50	U	50.0	56.2		ug/L		112	56 - 143
Dibromomethane	0.59	U	50.0	47.1		ug/L		94	63 - 138
Dichlorodifluoromethane	0.85	U	50.0	46.2		ug/L		92	16 - 160
Ethylbenzene	0.50	U	50.0	56.0		ug/L		112	58 - 131
Ethylene Dibromide	0.50	U	50.0	55.7		ug/L		111	64 - 132
Hexachlorobutadiene	0.90	U	50.0	54.9		ug/L		110	31 - 149
Iodomethane	0.68	U	50.0	58.9		ug/L		118	20 - 160
Isopropyl ether	0.70	U	50.0	46.2		ug/L		92	60 - 144
Isopropylbenzene	0.53	U	50.0	58.2		ug/L		116	56 - 133
Methyl Ethyl Ketone	2.6	U	200	171		ug/L		85	55 - 150
methyl isobutyl ketone	1.8	U	200	165		ug/L		83	63 - 146
Methyl tert-butyl ether	0.74	U	50.0	45.7		ug/L		91	59 - 137
Methylene Chloride	3.0	U	50.0	50.0		ug/L		100	60 - 146
m-Xylene & p-Xylene	1.6	U	50.0	56.3		ug/L		113	57 - 130
Naphthalene	1.0	U	50.0	56.2		ug/L		112	25 - 160
n-Butylbenzene	0.76	U	50.0	59.5		ug/L		119	41 - 142
N-Propylbenzene	0.69	U	50.0	59.5		ug/L		119	51 - 138
o-Xylene	0.60	U	50.0	57.4		ug/L		115	61 - 130
p-Cymene	0.71	U	50.0	57.1		ug/L		114	48 - 139
sec-Butylbenzene	0.70	U	50.0	61.1		ug/L		122	50 - 138
Styrene	1.0	U	50.0	55.9		ug/L		112	58 - 131
tert-Butylbenzene	0.63	U	50.0	60.0		ug/L		120	54 - 146
Tetrachloroethene	0.58	U	50.0	54.6		ug/L		109	52 - 133
Toluene	0.70	U	50.0	55.9		ug/L		112	65 - 130
trans-1,2-Dichloroethene	0.50	U	50.0	50.6		ug/L		101	61 - 143
trans-1,3-Dichloropropene	0.50	U	50.0	51.3		ug/L		103	53 - 133
Trichloroethene	0.50	U	50.0	49.6		ug/L		99	64 - 136
Trichlorofluoromethane	0.52	U	50.0	50.4		ug/L		101	54 - 156
Vinyl acetate	2.0	U	100	90.3		ug/L		90	26 - 160
Vinyl chloride	0.50	U	50.0	39.1		ug/L		78	46 - 152

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	103		78 - 118
Dibromofluoromethane	95		81 - 121
Toluene-d8 (Surr)	108		80 - 120

Lab Sample ID: 400-122302-1 MSD

Matrix: Water

Analysis Batch: 308608

Client Sample ID: C5ES-MW0010I-022.5-20160527

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.52	U	50.0	55.0		ug/L		110	59 - 137	2	30
1,1,1-Trichloroethane	0.50	U	50.0	50.2		ug/L		100	57 - 142	2	30
1,1,2,2-Tetrachloroethane	0.50	U	50.0	65.1		ug/L		130	66 - 135	8	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-1 MSD

Client Sample ID: C5ES-MW0010I-022.5-20160527

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 308608

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	0.50	U	50.0	56.7		ug/L		113	66 - 131	2	30
1,1-Dichloroethane	0.50	U	50.0	46.3		ug/L		93	61 - 144	1	30
1,1-Dichloroethene	0.50	U	50.0	53.6		ug/L		107	54 - 147	0	30
1,1-Dichloropropene	0.50	U	50.0	46.0		ug/L		92	65 - 136	1	30
1,2,3-Trichlorobenzene	0.70	U	50.0	58.2		ug/L		116	43 - 145	4	30
1,2,3-Trichloropropane	0.84	U	50.0	63.2		ug/L		126	65 - 133	10	30
1,2,4-Trichlorobenzene	0.82	U	50.0	58.1		ug/L		116	39 - 148	0	30
1,2,4-Trimethylbenzene	0.82	U	50.0	61.0		ug/L		122	50 - 139	3	30
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	56.9		ug/L		114	45 - 135	13	30
1,2-Dichlorobenzene	0.50	U	50.0	59.3		ug/L		119	52 - 137	2	30
1,2-Dichloroethane	0.50	U	50.0	45.6		ug/L		91	60 - 141	1	30
1,2-Dichloropropane	0.50	U	50.0	44.9		ug/L		90	66 - 137	0	30
1,3,5-Trimethylbenzene	0.56	U	50.0	63.3		ug/L		127	52 - 135	1	30
1,3-Dichlorobenzene	0.54	U	50.0	60.5		ug/L		121	54 - 135	1	30
1,3-Dichloropropane	0.50	U	50.0	52.7		ug/L		105	66 - 133	4	30
1,4-Dichlorobenzene	0.64	U	50.0	61.2		ug/L		122	53 - 135	1	30
2,2-Dichloropropane	0.50	U	50.0	46.9		ug/L		94	42 - 144	0	31
2-Chlorotoluene	0.57	U	50.0	59.1		ug/L		118	53 - 134	3	30
2-Hexanone	3.1	U	200	203		ug/L		102	65 - 140	10	30
4-Chlorotoluene	0.56	U	50.0	59.8		ug/L		120	54 - 133	0	30
Acetone	11	I	200	185		ug/L		87	43 - 160	13	30
Benzene	0.38	U	50.0	49.9		ug/L		100	56 - 142	1	30
Bromobenzene	0.54	U	50.0	61.2		ug/L		122	59 - 136	2	30
Bromochloromethane	0.52	U	50.0	49.0		ug/L		98	64 - 140	1	30
Bromodichloromethane	0.50	U	50.0	49.9		ug/L		100	59 - 143	2	30
Bromoform	0.71	U	50.0	54.8		ug/L		110	50 - 140	8	30
Bromomethane	0.98	U	50.0	34.4		ug/L		69	10 - 160	25	50
Carbon disulfide	1.3		50.0	51.7		ug/L		101	48 - 152	2	30
Carbon tetrachloride	0.50	U	50.0	48.3		ug/L		97	55 - 145	1	30
Chlorobenzene	0.50	U	50.0	55.9		ug/L		112	64 - 130	0	30
Chloroethane	0.76	U	50.0	51.1		ug/L		102	50 - 151	4	30
Chloroform	0.60	U	50.0	47.3		ug/L		95	60 - 141	0	30
Chloromethane	0.83	U	50.0	38.7		ug/L		77	49 - 148	1	31
cis-1,2-Dichloroethene	0.50	U	50.0	47.9		ug/L		96	59 - 143	1	30
cis-1,3-Dichloropropene	0.50	U	50.0	48.8		ug/L		98	57 - 140	3	30
Dibromochloromethane	0.50	U	50.0	58.0		ug/L		116	56 - 143	3	30
Dibromomethane	0.59	U	50.0	47.9		ug/L		96	63 - 138	2	30
Dichlorodifluoromethane	0.85	U	50.0	47.4		ug/L		95	16 - 160	3	31
Ethylbenzene	0.50	U	50.0	56.4		ug/L		113	58 - 131	1	30
Ethylene Dibromide	0.50	U	50.0	58.3		ug/L		117	64 - 132	5	30
Hexachlorobutadiene	0.90	U	50.0	55.6		ug/L		111	31 - 149	1	36
Iodomethane	0.68	U	50.0	57.2		ug/L		114	20 - 160	3	44
Isopropyl ether	0.70	U	50.0	44.9		ug/L		90	60 - 144	3	30
Isopropylbenzene	0.53	U	50.0	58.9		ug/L		118	56 - 133	1	30
Methyl Ethyl Ketone	2.6	U	200	187		ug/L		94	55 - 150	9	30
methyl isobutyl ketone	1.8	U	200	180		ug/L		90	63 - 146	9	30
Methyl tert-butyl ether	0.74	U	50.0	47.4		ug/L		95	59 - 137	4	30
Methylene Chloride	3.0	U	50.0	49.9		ug/L		100	60 - 146	0	32

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-1 MSD

Matrix: Water

Analysis Batch: 308608

Client Sample ID: C5ES-MW0010I-022.5-20160527

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	1.6	U	50.0	56.8		ug/L		114	57 - 130	1	30
Naphthalene	1.0	U	50.0	61.5		ug/L		123	25 - 160	9	30
n-Butylbenzene	0.76	U	50.0	59.6		ug/L		119	41 - 142	0	31
N-Propylbenzene	0.69	U	50.0	60.2		ug/L		120	51 - 138	1	30
o-Xylene	0.60	U	50.0	58.0		ug/L		116	61 - 130	1	30
p-Cymene	0.71	U	50.0	58.1		ug/L		116	48 - 139	2	30
sec-Butylbenzene	0.70	U	50.0	62.9		ug/L		126	50 - 138	3	30
Styrene	1.0	U	50.0	56.5		ug/L		113	58 - 131	1	30
tert-Butylbenzene	0.63	U	50.0	61.2		ug/L		122	54 - 146	2	30
Tetrachloroethene	0.58	U	50.0	55.3		ug/L		111	52 - 133	1	30
Toluene	0.70	U	50.0	55.9		ug/L		112	65 - 130	0	30
trans-1,2-Dichloroethene	0.50	U	50.0	50.6		ug/L		101	61 - 143	0	30
trans-1,3-Dichloropropene	0.50	U	50.0	52.7		ug/L		105	53 - 133	3	30
Trichloroethene	0.50	U	50.0	50.0		ug/L		100	64 - 136	1	30
Trichlorofluoromethane	0.52	U	50.0	51.7		ug/L		103	54 - 156	3	30
Vinyl acetate	2.0	U	100	94.4		ug/L		94	26 - 160	5	33
Vinyl chloride	0.50	U	50.0	39.6		ug/L		79	46 - 152	1	30

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene	106		78 - 118
Dibromofluoromethane	96		81 - 121
Toluene-d8 (Surr)	108		80 - 120

Lab Sample ID: MB 400-308665/4

Matrix: Water

Analysis Batch: 308665

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/05/16 07:58	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/05/16 07:58	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/05/16 07:58	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/05/16 07:58	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/05/16 07:58	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/05/16 07:58	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/05/16 07:58	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/05/16 07:58	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 07:58	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/05/16 07:58	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308665/4

Matrix: Water

Analysis Batch: 308665

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/05/16 07:58	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/05/16 07:58	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/05/16 07:58	1
Acetone	10	U	25	10	ug/L			06/05/16 07:58	1
Benzene	0.38	U	1.0	0.38	ug/L			06/05/16 07:58	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/05/16 07:58	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/05/16 07:58	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/05/16 07:58	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/05/16 07:58	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/05/16 07:58	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/05/16 07:58	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/05/16 07:58	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 07:58	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/05/16 07:58	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/05/16 07:58	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/05/16 07:58	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/05/16 07:58	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/05/16 07:58	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/05/16 07:58	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/05/16 07:58	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/05/16 07:58	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/05/16 07:58	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/05/16 07:58	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/05/16 07:58	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/05/16 07:58	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/05/16 07:58	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/05/16 07:58	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/05/16 07:58	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/05/16 07:58	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/05/16 07:58	1
Styrene	1.0	U	1.0	1.0	ug/L			06/05/16 07:58	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/05/16 07:58	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/05/16 07:58	1
Toluene	0.70	U	1.0	0.70	ug/L			06/05/16 07:58	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/05/16 07:58	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/05/16 07:58	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/05/16 07:58	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/05/16 07:58	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308665/4

Matrix: Water

Analysis Batch: 308665

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/05/16 07:58	1
Dibromofluoromethane	100		81 - 121		06/05/16 07:58	1
Toluene-d8 (Surr)	96		80 - 120		06/05/16 07:58	1

Lab Sample ID: LCS 400-308665/1002

Matrix: Water

Analysis Batch: 308665

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	53.7		ug/L		107	67 - 131
1,1,1-Trichloroethane	50.0	54.5		ug/L		109	68 - 130
1,1,2,2-Tetrachloroethane	50.0	59.1		ug/L		118	70 - 131
1,1,2-Trichloroethane	50.0	54.7		ug/L		109	70 - 130
1,1-Dichloroethane	50.0	50.5		ug/L		101	70 - 130
1,1-Dichloroethene	50.0	58.9		ug/L		118	63 - 134
1,1-Dichloropropene	50.0	49.2		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	50.0	53.7		ug/L		107	60 - 138
1,2,3-Trichloropropane	50.0	56.1		ug/L		112	70 - 130
1,2,4-Trichlorobenzene	50.0	56.1		ug/L		112	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	55.2		ug/L		110	54 - 135
1,2-Dichlorobenzene	50.0	54.9		ug/L		110	67 - 130
1,2-Dichloroethane	50.0	49.4		ug/L		99	69 - 130
1,2-Dichloropropane	50.0	48.6		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	56.9		ug/L		114	69 - 130
1,3-Dichlorobenzene	50.0	56.0		ug/L		112	70 - 130
1,3-Dichloropropane	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	56.9		ug/L		114	70 - 130
2,2-Dichloropropane	50.0	50.5		ug/L		101	52 - 135
2-Chlorotoluene	50.0	55.2		ug/L		110	70 - 130
2-Hexanone	200	205		ug/L		102	65 - 137
4-Chlorotoluene	50.0	55.1		ug/L		110	70 - 130
Acetone	200	213		ug/L		106	43 - 160
Benzene	50.0	53.5		ug/L		107	70 - 130
Bromobenzene	50.0	55.6		ug/L		111	70 - 132
Bromochloromethane	50.0	54.6		ug/L		109	70 - 130
Bromodichloromethane	50.0	54.1		ug/L		108	67 - 133
Bromoform	50.0	55.1		ug/L		110	57 - 140
Bromomethane	50.0	42.4		ug/L		85	10 - 160
Carbon disulfide	50.0	54.0		ug/L		108	61 - 137
Carbon tetrachloride	50.0	53.3		ug/L		107	61 - 137
Chlorobenzene	50.0	53.5		ug/L		107	70 - 130
Chloroethane	50.0	56.3		ug/L		113	55 - 141
Chloroform	50.0	51.7		ug/L		103	69 - 130
Chloromethane	50.0	47.3		ug/L		95	58 - 137
cis-1,2-Dichloroethene	50.0	51.1		ug/L		102	68 - 130
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	69 - 132
Dibromochloromethane	50.0	56.4		ug/L		113	67 - 135

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308665/1002

Matrix: Water

Analysis Batch: 308665

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	50.0	52.0		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	57.0		ug/L		114	41 - 146
Ethylbenzene	50.0	53.8		ug/L		108	70 - 130
Ethylene Dibromide	50.0	55.7		ug/L		111	70 - 130
Hexachlorobutadiene	50.0	51.2		ug/L		102	53 - 140
Iodomethane	50.0	39.3		ug/L		79	27 - 159
Isopropyl ether	50.0	51.4		ug/L		103	64 - 132
Isopropylbenzene	50.0	57.1		ug/L		114	70 - 130
Methyl Ethyl Ketone	200	217		ug/L		108	61 - 145
methyl isobutyl ketone	200	201		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	51.3		ug/L		103	66 - 130
Methylene Chloride	50.0	54.7		ug/L		109	66 - 135
m-Xylene & p-Xylene	50.0	54.8		ug/L		110	70 - 130
Naphthalene	50.0	55.2		ug/L		110	47 - 149
n-Butylbenzene	50.0	54.7		ug/L		109	67 - 130
N-Propylbenzene	50.0	53.7		ug/L		107	70 - 130
o-Xylene	50.0	55.8		ug/L		112	70 - 130
p-Cymene	50.0	53.1		ug/L		106	65 - 130
sec-Butylbenzene	50.0	56.3		ug/L		113	66 - 130
Styrene	50.0	54.6		ug/L		109	70 - 130
tert-Butylbenzene	50.0	55.8		ug/L		112	64 - 139
Tetrachloroethene	50.0	54.8		ug/L		110	65 - 130
Toluene	50.0	53.8		ug/L		108	70 - 130
trans-1,2-Dichloroethene	50.0	54.7		ug/L		109	70 - 130
trans-1,3-Dichloropropene	50.0	50.9		ug/L		102	63 - 130
Trichloroethene	50.0	54.6		ug/L		109	70 - 130
Trichlorofluoromethane	50.0	61.3		ug/L		123	65 - 138
Vinyl acetate	100	109		ug/L		109	26 - 160
Vinyl chloride	50.0	50.6		ug/L		101	59 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		78 - 118
Dibromofluoromethane	99		81 - 121
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 400-122302-4 MS

Matrix: Water

Analysis Batch: 308665

Client Sample ID: C5ES-MW0017S-009.5-20160527

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.52	U	50.0	51.0		ug/L		102	59 - 137
1,1,1-Trichloroethane	0.50	U	50.0	54.7		ug/L		109	57 - 142
1,1,2,2-Tetrachloroethane	0.50	U	50.0	54.5		ug/L		109	66 - 135
1,1,2-Trichloroethane	0.50	U	50.0	52.6		ug/L		105	66 - 131
1,1-Dichloroethane	0.50	U	50.0	50.2		ug/L		100	61 - 144
1,1-Dichloroethene	0.50	U	50.0	59.8		ug/L		120	54 - 147
1,1-Dichloropropene	0.50	U	50.0	49.1		ug/L		98	65 - 136
1,2,3-Trichlorobenzene	0.70	U	50.0	50.0		ug/L		100	43 - 145

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-4 MS

Client Sample ID: C5ES-MW0017S-009.5-20160527

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 308665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.84	U	50.0	53.0		ug/L		106	65 - 133
1,2,4-Trichlorobenzene	0.82	U	50.0	52.0		ug/L		104	39 - 148
1,2,4-Trimethylbenzene	0.82	U	50.0	51.1		ug/L		102	50 - 139
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	46.7		ug/L		93	45 - 135
1,2-Dichlorobenzene	0.50	U	50.0	52.7		ug/L		105	52 - 137
1,2-Dichloroethane	0.50	U	50.0	49.0		ug/L		98	60 - 141
1,2-Dichloropropane	0.50	U	50.0	49.1		ug/L		98	66 - 137
1,3,5-Trimethylbenzene	0.56	U	50.0	54.2		ug/L		108	52 - 135
1,3-Dichlorobenzene	3.9		50.0	56.1		ug/L		104	54 - 135
1,3-Dichloropropane	0.50	U	50.0	48.7		ug/L		97	66 - 133
1,4-Dichlorobenzene	5.6		50.0	58.4		ug/L		106	53 - 135
2,2-Dichloropropane	0.50	U	50.0	51.1		ug/L		102	42 - 144
2-Chlorotoluene	0.57	U	50.0	51.6		ug/L		103	53 - 134
2-Hexanone	3.1	U	200	182		ug/L		91	65 - 140
4-Chlorotoluene	0.56	U	50.0	51.7		ug/L		103	54 - 133
Acetone	10	U	200	181		ug/L		90	43 - 160
Benzene	0.38	U	50.0	53.9		ug/L		108	56 - 142
Bromobenzene	0.54	U	50.0	53.3		ug/L		107	59 - 136
Bromochloromethane	0.52	U	50.0	54.4		ug/L		109	64 - 140
Bromodichloromethane	0.50	U	50.0	53.5		ug/L		107	59 - 143
Bromoform	0.71	U	50.0	49.2		ug/L		98	50 - 140
Bromomethane	0.98	U	50.0	51.8		ug/L		104	10 - 160
Carbon disulfide	0.50	U	50.0	54.3		ug/L		109	48 - 152
Carbon tetrachloride	0.50	U	50.0	51.6		ug/L		103	55 - 145
Chlorobenzene	0.95	I	50.0	52.8		ug/L		104	64 - 130
Chloroethane	0.76	U	50.0	58.3		ug/L		117	50 - 151
Chloroform	0.60	U	50.0	51.4		ug/L		103	60 - 141
Chloromethane	0.83	U	50.0	46.9		ug/L		94	49 - 148
cis-1,2-Dichloroethene	0.50	U	50.0	52.0		ug/L		104	59 - 143
cis-1,3-Dichloropropene	0.50	U	50.0	51.6		ug/L		103	57 - 140
Dibromochloromethane	0.50	U	50.0	53.3		ug/L		107	56 - 143
Dibromomethane	0.59	U	50.0	51.7		ug/L		103	63 - 138
Dichlorodifluoromethane	0.85	U	50.0	55.6		ug/L		111	16 - 160
Ethylbenzene	0.50	U	50.0	51.9		ug/L		104	58 - 131
Ethylene Dibromide	0.50	U	50.0	54.0		ug/L		108	64 - 132
Hexachlorobutadiene	0.90	U	50.0	46.7		ug/L		93	31 - 149
Iodomethane	0.68	U	50.0	48.9		ug/L		98	20 - 160
Isopropyl ether	0.70	U	50.0	53.0		ug/L		106	60 - 144
Isopropylbenzene	0.53	U	50.0	54.4		ug/L		109	56 - 133
Methyl Ethyl Ketone	2.6	U	200	194		ug/L		97	55 - 150
methyl isobutyl ketone	1.8	U	200	189		ug/L		94	63 - 146
Methyl tert-butyl ether	0.74	U	50.0	50.2		ug/L		100	59 - 137
Methylene Chloride	3.0	U	50.0	55.4		ug/L		111	60 - 146
m-Xylene & p-Xylene	1.6	U	50.0	52.2		ug/L		104	57 - 130
Naphthalene	1.0	U	50.0	50.3		ug/L		101	25 - 160
n-Butylbenzene	0.76	U	50.0	50.3		ug/L		101	41 - 142
N-Propylbenzene	0.69	U	50.0	51.1		ug/L		102	51 - 138
o-Xylene	0.60	U	50.0	53.5		ug/L		107	61 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-4 MS

Client Sample ID: C5ES-MW0017S-009.5-20160527

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 308665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Cymene	0.71	U	50.0	49.2		ug/L		98	48 - 139
sec-Butylbenzene	0.70	U	50.0	52.7		ug/L		105	50 - 138
Styrene	1.0	U	50.0	52.6		ug/L		105	58 - 131
tert-Butylbenzene	0.63	U	50.0	52.9		ug/L		106	54 - 146
Tetrachloroethene	0.58	U	50.0	52.1		ug/L		104	52 - 133
Toluene	0.70	U	50.0	52.2		ug/L		104	65 - 130
trans-1,2-Dichloroethene	0.50	U	50.0	55.3		ug/L		111	61 - 143
trans-1,3-Dichloropropene	0.50	U	50.0	48.5		ug/L		97	53 - 133
Trichloroethene	0.50	U	50.0	54.2		ug/L		108	64 - 136
Trichlorofluoromethane	0.52	U	50.0	62.6		ug/L		125	54 - 156
Vinyl acetate	2.0	U	100	109		ug/L		109	26 - 160
Vinyl chloride	0.50	U	50.0	51.6		ug/L		103	46 - 152

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene	102		78 - 118
Dibromofluoromethane	100		81 - 121
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: 400-122302-4 MSD

Client Sample ID: C5ES-MW0017S-009.5-20160527

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 308665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.52	U	50.0	49.3		ug/L		99	59 - 137	3	30
1,1,1-Trichloroethane	0.50	U	50.0	53.5		ug/L		107	57 - 142	2	30
1,1,2,2-Tetrachloroethane	0.50	U	50.0	53.4		ug/L		107	66 - 135	2	30
1,1,2-Trichloroethane	0.50	U	50.0	51.2		ug/L		102	66 - 131	3	30
1,1-Dichloroethane	0.50	U	50.0	50.2		ug/L		100	61 - 144	0	30
1,1-Dichloroethene	0.50	U	50.0	58.1		ug/L		116	54 - 147	3	30
1,1-Dichloropropene	0.50	U	50.0	48.2		ug/L		96	65 - 136	2	30
1,2,3-Trichlorobenzene	0.70	U	50.0	43.3		ug/L		87	43 - 145	14	30
1,2,3-Trichloropropane	0.84	U	50.0	52.1		ug/L		104	65 - 133	2	30
1,2,4-Trichlorobenzene	0.82	U	50.0	44.6		ug/L		89	39 - 148	15	30
1,2,4-Trimethylbenzene	0.82	U	50.0	44.9		ug/L		90	50 - 139	13	30
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	45.2		ug/L		90	45 - 135	3	30
1,2-Dichlorobenzene	0.50	U	50.0	46.8		ug/L		94	52 - 137	12	30
1,2-Dichloroethane	0.50	U	50.0	47.5		ug/L		95	60 - 141	3	30
1,2-Dichloropropane	0.50	U	50.0	47.5		ug/L		95	66 - 137	3	30
1,3,5-Trimethylbenzene	0.56	U	50.0	49.1		ug/L		98	52 - 135	10	30
1,3-Dichlorobenzene	3.9	U	50.0	50.4		ug/L		93	54 - 135	11	30
1,3-Dichloropropane	0.50	U	50.0	47.4		ug/L		95	66 - 133	3	30
1,4-Dichlorobenzene	5.6	U	50.0	52.2		ug/L		93	53 - 135	11	30
2,2-Dichloropropane	0.50	U	50.0	50.0		ug/L		100	42 - 144	2	31
2-Chlorotoluene	0.57	U	50.0	46.2		ug/L		92	53 - 134	11	30
2-Hexanone	3.1	U	200	177		ug/L		88	65 - 140	3	30
4-Chlorotoluene	0.56	U	50.0	46.2		ug/L		92	54 - 133	11	30
Acetone	10	U	200	181		ug/L		90	43 - 160	0	30
Benzene	0.38	U	50.0	52.7		ug/L		105	56 - 142	2	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122302-4 MSD

Client Sample ID: C5ES-MW0017S-009.5-20160527

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 308665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	0.54	U	50.0	49.7		ug/L		99	59 - 136	7	30
Bromochloromethane	0.52	U	50.0	52.8		ug/L		106	64 - 140	3	30
Bromodichloromethane	0.50	U	50.0	52.2		ug/L		104	59 - 143	2	30
Bromoform	0.71	U	50.0	47.5		ug/L		95	50 - 140	4	30
Bromomethane	0.98	U	50.0	53.5		ug/L		107	10 - 160	3	50
Carbon disulfide	0.50	U	50.0	52.8		ug/L		106	48 - 152	3	30
Carbon tetrachloride	0.50	U	50.0	51.0		ug/L		102	55 - 145	1	30
Chlorobenzene	0.95	I	50.0	49.7		ug/L		97	64 - 130	6	30
Chloroethane	0.76	U	50.0	54.9		ug/L		110	50 - 151	6	30
Chloroform	0.60	U	50.0	50.8		ug/L		102	60 - 141	1	30
Chloromethane	0.83	U	50.0	45.6		ug/L		91	49 - 148	3	31
cis-1,2-Dichloroethene	0.50	U	50.0	50.9		ug/L		102	59 - 143	2	30
cis-1,3-Dichloropropene	0.50	U	50.0	49.9		ug/L		100	57 - 140	3	30
Dibromochloromethane	0.50	U	50.0	52.3		ug/L		105	56 - 143	2	30
Dibromomethane	0.59	U	50.0	50.2		ug/L		100	63 - 138	3	30
Dichlorodifluoromethane	0.85	U	50.0	53.6		ug/L		107	16 - 160	4	31
Ethylbenzene	0.50	U	50.0	48.6		ug/L		97	58 - 131	7	30
Ethylene Dibromide	0.50	U	50.0	52.3		ug/L		105	64 - 132	3	30
Hexachlorobutadiene	0.90	U	50.0	38.9		ug/L		78	31 - 149	18	36
Iodomethane	0.68	U	50.0	53.4		ug/L		107	20 - 160	9	44
Isopropyl ether	0.70	U	50.0	47.0		ug/L		94	60 - 144	12	30
Isopropylbenzene	0.53	U	50.0	50.2		ug/L		100	56 - 133	8	30
Methyl Ethyl Ketone	2.6	U	200	188		ug/L		94	55 - 150	3	30
methyl isobutyl ketone	1.8	U	200	183		ug/L		91	63 - 146	3	30
Methyl tert-butyl ether	0.74	U	50.0	49.5		ug/L		99	59 - 137	2	30
Methylene Chloride	3.0	U	50.0	53.9		ug/L		108	60 - 146	3	32
m-Xylene & p-Xylene	1.6	U	50.0	48.7		ug/L		97	57 - 130	7	30
Naphthalene	1.0	U	50.0	47.6		ug/L		95	25 - 160	5	30
n-Butylbenzene	0.76	U	50.0	42.0		ug/L		84	41 - 142	18	31
N-Propylbenzene	0.69	U	50.0	45.7		ug/L		91	51 - 138	11	30
o-Xylene	0.60	U	50.0	49.9		ug/L		100	61 - 130	7	30
p-Cymene	0.71	U	50.0	42.6		ug/L		85	48 - 139	14	30
sec-Butylbenzene	0.70	U	50.0	47.0		ug/L		94	50 - 138	11	30
Styrene	1.0	U	50.0	48.5		ug/L		97	58 - 131	8	30
tert-Butylbenzene	0.63	U	50.0	48.0		ug/L		96	54 - 146	10	30
Tetrachloroethene	0.58	U	50.0	49.6		ug/L		99	52 - 133	5	30
Toluene	0.70	U	50.0	50.2		ug/L		100	65 - 130	4	30
trans-1,2-Dichloroethene	0.50	U	50.0	54.0		ug/L		108	61 - 143	2	30
trans-1,3-Dichloropropene	0.50	U	50.0	47.0		ug/L		94	53 - 133	3	30
Trichloroethene	0.50	U	50.0	52.3		ug/L		105	64 - 136	3	30
Trichlorofluoromethane	0.52	U	50.0	59.0		ug/L		118	54 - 156	6	30
Vinyl acetate	2.0	U	100	101		ug/L		101	26 - 160	7	33
Vinyl chloride	0.50	U	50.0	49.1		ug/L		98	46 - 152	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	103		78 - 118
Dibromofluoromethane	99		81 - 121
Toluene-d8 (Surr)	101		80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Lab Sample ID: MB 400-308685/4

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:48	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 09:48	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 09:48	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 09:48	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 09:48	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 09:48	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 09:48	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 09:48	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 09:48	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 09:48	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 09:48	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 09:48	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 09:48	1
Acetone	10	U	25	10	ug/L			06/06/16 09:48	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 09:48	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 09:48	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:48	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 09:48	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 09:48	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 09:48	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 09:48	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 09:48	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 09:48	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 09:48	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 09:48	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 09:48	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 09:48	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 09:48	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 09:48	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 09:48	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 09:48	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 09:48	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308685/4

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 09:48	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 09:48	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 09:48	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 09:48	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 09:48	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 09:48	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 09:48	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 09:48	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 09:48	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 09:48	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 09:48	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 09:48	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 09:48	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:48	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 09:48	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 09:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/06/16 09:48	1
Dibromofluoromethane	98		81 - 121		06/06/16 09:48	1
Toluene-d8 (Surr)	99		80 - 120		06/06/16 09:48	1

Lab Sample ID: LCS 400-308685/1002

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	67 - 131
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	68 - 130
1,1,2,2-Tetrachloroethane	50.0	55.0		ug/L		110	70 - 131
1,1,2-Trichloroethane	50.0	54.3		ug/L		109	70 - 130
1,1-Dichloroethane	50.0	44.4		ug/L		89	70 - 130
1,1-Dichloroethene	50.0	52.4		ug/L		105	63 - 134
1,1-Dichloropropene	50.0	44.2		ug/L		88	70 - 130
1,2,3-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 138
1,2,3-Trichloropropane	50.0	53.0		ug/L		106	70 - 130
1,2,4-Trichlorobenzene	50.0	52.6		ug/L		105	60 - 140
1,2,4-Trimethylbenzene	50.0	50.7		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	54 - 135
1,2-Dichlorobenzene	50.0	52.4		ug/L		105	67 - 130
1,2-Dichloroethane	50.0	43.7		ug/L		87	69 - 130
1,2-Dichloropropane	50.0	43.6		ug/L		87	70 - 130
1,3,5-Trimethylbenzene	50.0	53.9		ug/L		108	69 - 130
1,3-Dichlorobenzene	50.0	53.1		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	49.4		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	53.2		ug/L		106	70 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308685/1002

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	45.1		ug/L		90	52 - 135
2-Chlorotoluene	50.0	50.7		ug/L		101	70 - 130
2-Hexanone	200	198		ug/L		99	65 - 137
4-Chlorotoluene	50.0	51.1		ug/L		102	70 - 130
Acetone	200	196		ug/L		98	43 - 160
Benzene	50.0	48.0		ug/L		96	70 - 130
Bromobenzene	50.0	52.7		ug/L		105	70 - 132
Bromochloromethane	50.0	48.1		ug/L		96	70 - 130
Bromodichloromethane	50.0	48.6		ug/L		97	67 - 133
Bromoform	50.0	53.6		ug/L		107	57 - 140
Bromomethane	50.0	35.7		ug/L		71	10 - 160
Carbon disulfide	50.0	48.5		ug/L		97	61 - 137
Carbon tetrachloride	50.0	46.8		ug/L		94	61 - 137
Chlorobenzene	50.0	53.5		ug/L		107	70 - 130
Chloroethane	50.0	51.6		ug/L		103	55 - 141
Chloroform	50.0	46.2		ug/L		92	69 - 130
Chloromethane	50.0	39.6		ug/L		79	58 - 137
cis-1,2-Dichloroethene	50.0	45.3		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	47.1		ug/L		94	69 - 132
Dibromochloromethane	50.0	56.0		ug/L		112	67 - 135
Dibromomethane	50.0	46.9		ug/L		94	70 - 130
Dichlorodifluoromethane	50.0	50.1		ug/L		100	41 - 146
Ethylbenzene	50.0	53.7		ug/L		107	70 - 130
Ethylene Dibromide	50.0	55.9		ug/L		112	70 - 130
Hexachlorobutadiene	50.0	47.8		ug/L		96	53 - 140
Iodomethane	50.0	36.5		ug/L		73	27 - 159
Isopropyl ether	50.0	44.1		ug/L		88	64 - 132
Isopropylbenzene	50.0	56.8		ug/L		114	70 - 130
Methyl Ethyl Ketone	200	190		ug/L		95	61 - 145
methyl isobutyl ketone	200	173		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	44.9		ug/L		90	66 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
m-Xylene & p-Xylene	50.0	54.1		ug/L		108	70 - 130
Naphthalene	50.0	50.5		ug/L		101	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	50.6		ug/L		101	70 - 130
o-Xylene	50.0	55.2		ug/L		110	70 - 130
p-Cymene	50.0	49.6		ug/L		99	65 - 130
sec-Butylbenzene	50.0	52.7		ug/L		105	66 - 130
Styrene	50.0	54.4		ug/L		109	70 - 130
tert-Butylbenzene	50.0	52.6		ug/L		105	64 - 139
Tetrachloroethene	50.0	54.3		ug/L		109	65 - 130
Toluene	50.0	53.1		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	48.4		ug/L		97	70 - 130
trans-1,3-Dichloropropene	50.0	50.2		ug/L		100	63 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	53.6		ug/L		107	65 - 138
Vinyl acetate	100	95.7		ug/L		96	26 - 160

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308685/1002

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	50.0	42.4		ug/L		85	59 - 136
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	98		78 - 118				
Dibromofluoromethane	97		81 - 121				
Toluene-d8 (Surr)	106		80 - 120				

Lab Sample ID: 400-122450-A-5 MS

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.52	U	50.0	50.2		ug/L		100	59 - 137
1,1,1-Trichloroethane	0.50	U	50.0	47.9		ug/L		96	57 - 142
1,1,2,2-Tetrachloroethane	0.50	U	50.0	58.0		ug/L		116	66 - 135
1,1,2-Trichloroethane	0.50	U	50.0	54.0		ug/L		108	66 - 131
1,1-Dichloroethane	0.50	U	50.0	44.5		ug/L		89	61 - 144
1,1-Dichloroethene	0.50	U	50.0	51.5		ug/L		103	54 - 147
1,1-Dichloropropene	0.50	U	50.0	43.4		ug/L		87	65 - 136
1,2,3-Trichlorobenzene	0.70	U	50.0	48.8		ug/L		98	43 - 145
1,2,3-Trichloropropane	0.84	U	50.0	58.6		ug/L		117	65 - 133
1,2,4-Trichlorobenzene	0.82	U	50.0	48.5		ug/L		97	39 - 148
1,2,4-Trimethylbenzene	0.82	U	50.0	47.8		ug/L		96	50 - 139
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	49.8		ug/L		100	45 - 135
1,2-Dichlorobenzene	0.50	U	50.0	50.3		ug/L		101	52 - 137
1,2-Dichloroethane	0.50	U	50.0	43.7		ug/L		87	60 - 141
1,2-Dichloropropane	0.50	U	50.0	42.9		ug/L		86	66 - 137
1,3,5-Trimethylbenzene	0.56	U	50.0	51.6		ug/L		103	52 - 135
1,3-Dichlorobenzene	0.54	U	50.0	50.3		ug/L		101	54 - 135
1,3-Dichloropropane	0.50	U	50.0	48.7		ug/L		97	66 - 133
1,4-Dichlorobenzene	0.64	U	50.0	50.3		ug/L		101	53 - 135
2,2-Dichloropropane	0.50	U	50.0	44.4		ug/L		89	42 - 144
2-Chlorotoluene	0.57	U	50.0	49.5		ug/L		99	53 - 134
2-Hexanone	3.1	U	200	202		ug/L		101	65 - 140
4-Chlorotoluene	0.56	U	50.0	48.9		ug/L		98	54 - 133
Acetone	15	I	200	203		ug/L		94	43 - 160
Benzene	0.60	I	50.0	47.8		ug/L		94	56 - 142
Bromobenzene	0.54	U	50.0	51.8		ug/L		104	59 - 136
Bromochloromethane	0.52	U	50.0	48.3		ug/L		97	64 - 140
Bromodichloromethane	0.50	U	50.0	48.1		ug/L		96	59 - 143
Bromoform	0.71	U	50.0	49.8		ug/L		100	50 - 140
Bromomethane	0.98	U	50.0	41.5		ug/L		83	10 - 160
Carbon disulfide	0.50	U	50.0	47.7		ug/L		95	48 - 152
Carbon tetrachloride	0.50	U	50.0	45.7		ug/L		91	55 - 145
Chlorobenzene	0.50	U	50.0	49.8		ug/L		100	64 - 130
Chloroethane	0.76	U	50.0	55.7		ug/L		111	50 - 151
Chloroform	0.60	U	50.0	46.2		ug/L		92	60 - 141
Chloromethane	0.83	U	50.0	41.0		ug/L		82	49 - 148

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122450-A-5 MS

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	0.50	U	50.0	45.0		ug/L		90	59 - 143
cis-1,3-Dichloropropene	0.50	U	50.0	45.5		ug/L		91	57 - 140
Dibromochloromethane	0.50	U	50.0	52.9		ug/L		106	56 - 143
Dibromomethane	0.59	U	50.0	47.5		ug/L		95	63 - 138
Dichlorodifluoromethane	0.85	U	50.0	47.8		ug/L		96	16 - 160
Ethylbenzene	0.50	U	50.0	49.1		ug/L		98	58 - 131
Ethylene Dibromide	0.50	U	50.0	54.7		ug/L		109	64 - 132
Hexachlorobutadiene	0.90	U	50.0	41.8		ug/L		84	31 - 149
Iodomethane	0.68	U	50.0	39.6		ug/L		79	20 - 160
Isopropyl ether	0.70	U	50.0	49.4		ug/L		99	60 - 144
Isopropylbenzene	3.0		50.0	52.9		ug/L		100	56 - 133
Methyl Ethyl Ketone	2.6	U	200	197		ug/L		99	55 - 150
methyl isobutyl ketone	1.8	U	200	178		ug/L		89	63 - 146
Methyl tert-butyl ether	19		50.0	63.2		ug/L		88	59 - 137
Methylene Chloride	3.0	U	50.0	48.1		ug/L		96	60 - 146
m-Xylene & p-Xylene	1.6	I	50.0	50.0		ug/L		100	57 - 130
Naphthalene	1.0	U	50.0	52.3		ug/L		105	25 - 160
n-Butylbenzene	0.76	U	50.0	46.0		ug/L		92	41 - 142
N-Propylbenzene	2.1		50.0	49.8		ug/L		95	51 - 138
o-Xylene	0.60	U	50.0	50.5		ug/L		101	61 - 130
p-Cymene	0.71	U	50.0	45.9		ug/L		92	48 - 139
sec-Butylbenzene	0.70	U	50.0	49.5		ug/L		99	50 - 138
Styrene	1.0	U	50.0	49.6		ug/L		99	58 - 131
tert-Butylbenzene	1.2		50.0	51.0		ug/L		100	54 - 146
Tetrachloroethene	0.58	U	50.0	49.3		ug/L		99	52 - 133
Toluene	0.70	U	50.0	51.0		ug/L		102	65 - 130
trans-1,2-Dichloroethene	0.50	U	50.0	47.1		ug/L		94	61 - 143
trans-1,3-Dichloropropene	0.50	U	50.0	48.3		ug/L		97	53 - 133
Trichloroethene	0.50	U	50.0	48.5		ug/L		97	64 - 136
Trichlorofluoromethane	0.52	U	50.0	57.9		ug/L		116	54 - 156
Vinyl acetate	2.0	U	100	107		ug/L		107	26 - 160
Vinyl chloride	0.50	U	50.0	45.7		ug/L		91	46 - 152

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	103		78 - 118
Dibromofluoromethane	98		81 - 121
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: 400-122450-A-5 MSD

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.52	U	50.0	48.0		ug/L		96	59 - 137	4	30
1,1,1-Trichloroethane	0.50	U	50.0	46.7		ug/L		93	57 - 142	3	30
1,1,2,2-Tetrachloroethane	0.50	U	50.0	54.6		ug/L		109	66 - 135	6	30
1,1,2-Trichloroethane	0.50	U	50.0	52.5		ug/L		105	66 - 131	3	30
1,1-Dichloroethane	0.50	U	50.0	43.8		ug/L		88	61 - 144	2	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122450-A-5 MSD

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.50	U	50.0	50.7		ug/L		101	54 - 147	2	30
1,1-Dichloropropene	0.50	U	50.0	42.0		ug/L		84	65 - 136	3	30
1,2,3-Trichlorobenzene	0.70	U	50.0	42.7		ug/L		85	43 - 145	13	30
1,2,3-Trichloropropane	0.84	U	50.0	53.6		ug/L		107	65 - 133	9	30
1,2,4-Trichlorobenzene	0.82	U	50.0	42.4		ug/L		85	39 - 148	14	30
1,2,4-Trimethylbenzene	0.82	U	50.0	44.6		ug/L		89	50 - 139	7	30
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	42.5		ug/L		85	45 - 135	16	30
1,2-Dichlorobenzene	0.50	U	50.0	46.6		ug/L		93	52 - 137	8	30
1,2-Dichloroethane	0.50	U	50.0	42.7		ug/L		85	60 - 141	2	30
1,2-Dichloropropane	0.50	U	50.0	41.9		ug/L		84	66 - 137	2	30
1,3,5-Trimethylbenzene	0.56	U	50.0	47.8		ug/L		96	52 - 135	8	30
1,3-Dichlorobenzene	0.54	U	50.0	45.9		ug/L		92	54 - 135	9	30
1,3-Dichloropropane	0.50	U	50.0	46.5		ug/L		93	66 - 133	4	30
1,4-Dichlorobenzene	0.64	U	50.0	46.3		ug/L		93	53 - 135	8	30
2,2-Dichloropropane	0.50	U	50.0	43.6		ug/L		87	42 - 144	2	31
2-Chlorotoluene	0.57	U	50.0	45.4		ug/L		91	53 - 134	8	30
2-Hexanone	3.1	U	200	178		ug/L		89	65 - 140	13	30
4-Chlorotoluene	0.56	U	50.0	45.2		ug/L		90	54 - 133	8	30
Acetone	15	I	200	174		ug/L		79	43 - 160	15	30
Benzene	0.60	I	50.0	46.5		ug/L		92	56 - 142	3	30
Bromobenzene	0.54	U	50.0	49.7		ug/L		99	59 - 136	4	30
Bromochloromethane	0.52	U	50.0	46.7		ug/L		93	64 - 140	3	30
Bromodichloromethane	0.50	U	50.0	47.1		ug/L		94	59 - 143	2	30
Bromoform	0.71	U	50.0	46.6		ug/L		93	50 - 140	7	30
Bromomethane	0.98	U	50.0	41.6		ug/L		83	10 - 160	0	50
Carbon disulfide	0.50	U	50.0	46.3		ug/L		93	48 - 152	3	30
Carbon tetrachloride	0.50	U	50.0	44.8		ug/L		90	55 - 145	2	30
Chlorobenzene	0.50	U	50.0	46.9		ug/L		94	64 - 130	6	30
Chloroethane	0.76	U	50.0	43.4		ug/L		87	50 - 151	25	30
Chloroform	0.60	U	50.0	45.3		ug/L		91	60 - 141	2	30
Chloromethane	0.83	U	50.0	35.9		ug/L		72	49 - 148	13	31
cis-1,2-Dichloroethene	0.50	U	50.0	43.4		ug/L		87	59 - 143	4	30
cis-1,3-Dichloropropene	0.50	U	50.0	43.8		ug/L		88	57 - 140	4	30
Dibromochloromethane	0.50	U	50.0	50.9		ug/L		102	56 - 143	4	30
Dibromomethane	0.59	U	50.0	45.5		ug/L		91	63 - 138	4	30
Dichlorodifluoromethane	0.85	U	50.0	41.2		ug/L		82	16 - 160	15	31
Ethylbenzene	0.50	U	50.0	47.0		ug/L		94	58 - 131	4	30
Ethylene Dibromide	0.50	U	50.0	51.2		ug/L		102	64 - 132	7	30
Hexachlorobutadiene	0.90	U	50.0	36.1		ug/L		72	31 - 149	14	36
Iodomethane	0.68	U	50.0	40.6		ug/L		81	20 - 160	2	44
Isopropyl ether	0.70	U	50.0	41.8		ug/L		84	60 - 144	17	30
Isopropylbenzene	3.0		50.0	50.2		ug/L		94	56 - 133	5	30
Methyl Ethyl Ketone	2.6	U	200	175		ug/L		88	55 - 150	12	30
methyl isobutyl ketone	1.8	U	200	161		ug/L		80	63 - 146	10	30
Methyl tert-butyl ether	19		50.0	61.1		ug/L		84	59 - 137	3	30
Methylene Chloride	3.0	U	50.0	46.7		ug/L		93	60 - 146	3	32
m-Xylene & p-Xylene	1.6	I	50.0	47.4		ug/L		95	57 - 130	5	30
Naphthalene	1.0	U	50.0	48.2		ug/L		96	25 - 160	8	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122450-A-5 MSD

Matrix: Water

Analysis Batch: 308685

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	0.76	U	50.0	40.3		ug/L		81	41 - 142	13	31
N-Propylbenzene	2.1		50.0	46.2		ug/L		88	51 - 138	7	30
o-Xylene	0.60	U	50.0	47.9		ug/L		96	61 - 130	5	30
p-Cymene	0.71	U	50.0	42.0		ug/L		84	48 - 139	9	30
sec-Butylbenzene	0.70	U	50.0	45.9		ug/L		92	50 - 138	8	30
Styrene	1.0	U	50.0	46.9		ug/L		94	58 - 131	6	30
tert-Butylbenzene	1.2		50.0	48.5		ug/L		95	54 - 146	5	30
Tetrachloroethene	0.58	U	50.0	47.8		ug/L		96	52 - 133	3	30
Toluene	0.70	U	50.0	49.1		ug/L		98	65 - 130	4	30
trans-1,2-Dichloroethene	0.50	U	50.0	46.4		ug/L		93	61 - 143	2	30
trans-1,3-Dichloropropene	0.50	U	50.0	46.1		ug/L		92	53 - 133	5	30
Trichloroethene	0.50	U	50.0	46.3		ug/L		93	64 - 136	5	30
Trichlorofluoromethane	0.52	U	50.0	50.1		ug/L		100	54 - 156	14	30
Vinyl acetate	2.0	U	100	87.3		ug/L		87	26 - 160	20	33
Vinyl chloride	0.50	U	50.0	39.5		ug/L		79	46 - 152	14	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	102		78 - 118
Dibromofluoromethane	96		81 - 121
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: MB 400-308687/4

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:17	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/06/16 09:17	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/06/16 09:17	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/06/16 09:17	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/06/16 09:17	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/06/16 09:17	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/06/16 09:17	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/06/16 09:17	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 09:17	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/06/16 09:17	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/06/16 09:17	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/06/16 09:17	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308687/4

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/06/16 09:17	1
Acetone	10	U	25	10	ug/L			06/06/16 09:17	1
Benzene	0.38	U	1.0	0.38	ug/L			06/06/16 09:17	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/06/16 09:17	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:17	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/06/16 09:17	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/06/16 09:17	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/06/16 09:17	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/06/16 09:17	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/06/16 09:17	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 09:17	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/06/16 09:17	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/06/16 09:17	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/06/16 09:17	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/06/16 09:17	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/06/16 09:17	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/06/16 09:17	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/06/16 09:17	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/06/16 09:17	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/06/16 09:17	1
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/06/16 09:17	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/06/16 09:17	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/06/16 09:17	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/06/16 09:17	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/06/16 09:17	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/06/16 09:17	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/06/16 09:17	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/06/16 09:17	1
Styrene	1.0	U	1.0	1.0	ug/L			06/06/16 09:17	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/06/16 09:17	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/06/16 09:17	1
Toluene	0.70	U	1.0	0.70	ug/L			06/06/16 09:17	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/06/16 09:17	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/06/16 09:17	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/06/16 09:17	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/06/16 09:17	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308687/4

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		78 - 118		06/06/16 09:17	1
Dibromofluoromethane	105		81 - 121		06/06/16 09:17	1
Toluene-d8 (Surr)	95		80 - 120		06/06/16 09:17	1

Lab Sample ID: LCS 400-308687/1002

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	45.8		ug/L		92	67 - 131
1,1,1-Trichloroethane	50.0	49.4		ug/L		99	68 - 130
1,1,2,2-Tetrachloroethane	50.0	38.9		ug/L		78	70 - 131
1,1,2-Trichloroethane	50.0	42.7		ug/L		85	70 - 130
1,1-Dichloroethane	50.0	47.1		ug/L		94	70 - 130
1,1-Dichloroethene	50.0	44.1		ug/L		88	63 - 134
1,1-Dichloropropene	50.0	45.9		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	60 - 138
1,2,3-Trichloropropane	50.0	38.8		ug/L		78	70 - 130
1,2,4-Trichlorobenzene	50.0	44.6		ug/L		89	60 - 140
1,2,4-Trimethylbenzene	50.0	42.4		ug/L		85	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	37.9		ug/L		76	54 - 135
1,2-Dichlorobenzene	50.0	42.1		ug/L		84	67 - 130
1,2-Dichloroethane	50.0	48.9		ug/L		98	69 - 130
1,2-Dichloropropane	50.0	45.3		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	43.6		ug/L		87	69 - 130
1,3-Dichlorobenzene	50.0	42.5		ug/L		85	70 - 130
1,3-Dichloropropane	50.0	42.4		ug/L		85	70 - 130
1,4-Dichlorobenzene	50.0	42.0		ug/L		84	70 - 130
2,2-Dichloropropane	50.0	48.4		ug/L		97	52 - 135
2-Chlorotoluene	50.0	40.4		ug/L		81	70 - 130
2-Hexanone	200	191		ug/L		95	65 - 137
4-Chlorotoluene	50.0	41.5		ug/L		83	70 - 130
Acetone	200	299		ug/L		150	43 - 160
Benzene	50.0	44.3		ug/L		89	70 - 130
Bromobenzene	50.0	42.4		ug/L		85	70 - 132
Bromochloromethane	50.0	49.5		ug/L		99	70 - 130
Bromodichloromethane	50.0	48.5		ug/L		97	67 - 133
Bromoform	50.0	43.6		ug/L		87	57 - 140
Bromomethane	50.0	62.8		ug/L		126	10 - 160
Carbon disulfide	50.0	46.8		ug/L		94	61 - 137
Carbon tetrachloride	50.0	52.1		ug/L		104	61 - 137
Chlorobenzene	50.0	43.1		ug/L		86	70 - 130
Chloroethane	50.0	53.0		ug/L		106	55 - 141
Chloroform	50.0	45.7		ug/L		91	69 - 130
Chloromethane	50.0	42.7		ug/L		85	58 - 137
cis-1,2-Dichloroethene	50.0	47.3		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	69 - 132
Dibromochloromethane	50.0	45.1		ug/L		90	67 - 135

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308687/1002

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromomethane	50.0	48.7		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	43.3		ug/L		87	41 - 146
Ethylbenzene	50.0	43.5		ug/L		87	70 - 130
Ethylene Dibromide	50.0	42.9		ug/L		86	70 - 130
Hexachlorobutadiene	50.0	44.5		ug/L		89	53 - 140
Iodomethane	50.0	56.2		ug/L		112	27 - 159
Isopropyl ether	50.0	49.7		ug/L		99	64 - 132
Isopropylbenzene	50.0	44.3		ug/L		89	70 - 130
Methyl Ethyl Ketone	200	207		ug/L		104	61 - 145
methyl isobutyl ketone	200	196		ug/L		98	69 - 138
Methyl tert-butyl ether	50.0	37.3		ug/L		75	66 - 130
Methylene Chloride	50.0	45.3		ug/L		91	66 - 135
m-Xylene & p-Xylene	50.0	43.3		ug/L		87	70 - 130
Naphthalene	50.0	41.8		ug/L		84	47 - 149
n-Butylbenzene	50.0	42.1		ug/L		84	67 - 130
N-Propylbenzene	50.0	41.2		ug/L		82	70 - 130
o-Xylene	50.0	43.9		ug/L		88	70 - 130
p-Cymene	50.0	42.7		ug/L		85	65 - 130
sec-Butylbenzene	50.0	40.8		ug/L		82	66 - 130
Styrene	50.0	45.0		ug/L		90	70 - 130
tert-Butylbenzene	50.0	41.3		ug/L		83	64 - 139
Tetrachloroethene	50.0	42.5		ug/L		85	65 - 130
Toluene	50.0	42.3		ug/L		85	70 - 130
trans-1,2-Dichloroethene	50.0	44.4		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	46.0		ug/L		92	63 - 130
Trichloroethene	50.0	45.4		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	49.4		ug/L		99	65 - 138
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	44.8		ug/L		90	59 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		78 - 118
Dibromofluoromethane	101		81 - 121
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: 400-122488-A-12 MS

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.52	U	50.0	50.8		ug/L		102	59 - 137
1,1,1-Trichloroethane	0.50	U	50.0	52.9		ug/L		106	57 - 142
1,1,2,2-Tetrachloroethane	0.50	U	50.0	40.1		ug/L		80	66 - 135
1,1,2-Trichloroethane	0.50	U	50.0	44.8		ug/L		90	66 - 131
1,1-Dichloroethane	0.50	U	50.0	52.2		ug/L		104	61 - 144
1,1-Dichloroethene	0.50	U	50.0	47.6		ug/L		95	54 - 147
1,1-Dichloropropene	0.50	U	50.0	49.6		ug/L		99	65 - 136
1,2,3-Trichlorobenzene	0.70	U	50.0	48.0		ug/L		96	43 - 145

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122488-A-12 MS

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.84	U	50.0	43.0		ug/L		86	65 - 133
1,2,4-Trichlorobenzene	0.82	U	50.0	48.3		ug/L		97	39 - 148
1,2,4-Trimethylbenzene	0.82	U	50.0	45.6		ug/L		91	50 - 139
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	40.8		ug/L		82	45 - 135
1,2-Dichlorobenzene	0.50	U	50.0	45.1		ug/L		90	52 - 137
1,2-Dichloroethane	0.50	U	50.0	52.1		ug/L		104	60 - 141
1,2-Dichloropropane	0.50	U	50.0	49.4		ug/L		99	66 - 137
1,3,5-Trimethylbenzene	0.56	U	50.0	45.8		ug/L		92	52 - 135
1,3-Dichlorobenzene	0.54	U	50.0	45.2		ug/L		90	54 - 135
1,3-Dichloropropane	0.50	U	50.0	46.1		ug/L		92	66 - 133
1,4-Dichlorobenzene	0.64	U	50.0	45.0		ug/L		90	53 - 135
2,2-Dichloropropane	0.50	U	50.0	57.2		ug/L		114	42 - 144
2-Chlorotoluene	0.57	U	50.0	43.5		ug/L		87	53 - 134
2-Hexanone	3.1	U	200	179		ug/L		89	65 - 140
4-Chlorotoluene	0.56	U	50.0	44.5		ug/L		89	54 - 133
Acetone	36		200	216		ug/L		90	43 - 160
Benzene	0.38	U	50.0	48.8		ug/L		98	56 - 142
Bromobenzene	0.54	U	50.0	45.8		ug/L		92	59 - 136
Bromochloromethane	0.52	U	50.0	54.6		ug/L		109	64 - 140
Bromodichloromethane	0.50	U	50.0	51.5		ug/L		103	59 - 143
Bromoform	0.71	U	50.0	45.2		ug/L		90	50 - 140
Bromomethane	0.98	U	50.0	83.1	J3	ug/L		166	10 - 160
Carbon disulfide	0.50	U	50.0	50.9		ug/L		102	48 - 152
Carbon tetrachloride	0.50	U	50.0	55.9		ug/L		112	55 - 145
Chlorobenzene	0.50	U	50.0	46.1		ug/L		92	64 - 130
Chloroethane	0.76	U	50.0	58.5		ug/L		117	50 - 151
Chloroform	0.60	U	50.0	50.8		ug/L		102	60 - 141
Chloromethane	0.83	U	50.0	42.2		ug/L		84	49 - 148
cis-1,2-Dichloroethene	0.50	U	50.0	52.1		ug/L		104	59 - 143
cis-1,3-Dichloropropene	0.50	U	50.0	53.1		ug/L		106	57 - 140
Dibromochloromethane	0.50	U	50.0	47.5		ug/L		95	56 - 143
Dibromomethane	0.59	U	50.0	50.8		ug/L		102	63 - 138
Dichlorodifluoromethane	0.85	U	50.0	45.1		ug/L		90	16 - 160
Ethylbenzene	0.50	U	50.0	47.4		ug/L		95	58 - 131
Ethylene Dibromide	0.50	U	50.0	45.7		ug/L		91	64 - 132
Hexachlorobutadiene	0.90	U	50.0	47.7		ug/L		95	31 - 149
Iodomethane	0.68	U	50.0	61.7		ug/L		123	20 - 160
Isopropyl ether	0.70	U	50.0	44.2		ug/L		88	60 - 144
Isopropylbenzene	0.53	U	50.0	48.2		ug/L		96	56 - 133
Methyl Ethyl Ketone	2.6	U	200	198		ug/L		99	55 - 150
methyl isobutyl ketone	1.8	U	200	206		ug/L		103	63 - 146
Methyl tert-butyl ether	0.74	U	50.0	46.1		ug/L		92	59 - 137
Methylene Chloride	3.0	U	50.0	49.7		ug/L		99	60 - 146
m-Xylene & p-Xylene	1.6	U	50.0	47.5		ug/L		95	57 - 130
Naphthalene	1.0	U	50.0	44.7		ug/L		89	25 - 160
n-Butylbenzene	0.76	U	50.0	44.1		ug/L		88	41 - 142
N-Propylbenzene	0.69	U	50.0	44.7		ug/L		89	51 - 138
o-Xylene	0.60	U	50.0	47.9		ug/L		96	61 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122488-A-12 MS

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Cymene	0.71	U	50.0	46.3		ug/L		93	48 - 139
sec-Butylbenzene	0.70	U	50.0	44.5		ug/L		89	50 - 138
Styrene	1.0	U	50.0	48.1		ug/L		96	58 - 131
tert-Butylbenzene	0.63	U	50.0	44.5		ug/L		89	54 - 146
Tetrachloroethene	7.0		50.0	54.1		ug/L		94	52 - 133
Toluene	0.80	I	50.0	46.5		ug/L		91	65 - 130
trans-1,2-Dichloroethene	0.50	U	50.0	49.5		ug/L		99	61 - 143
trans-1,3-Dichloropropene	0.50	U	50.0	50.2		ug/L		100	53 - 133
Trichloroethene	0.50	U	50.0	50.0		ug/L		100	64 - 136
Trichlorofluoromethane	0.52	U	50.0	50.2		ug/L		100	54 - 156
Vinyl acetate	2.0	U	100	107		ug/L		107	26 - 160
Vinyl chloride	0.50	U	50.0	47.9		ug/L		96	46 - 152

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	96		78 - 118
Dibromofluoromethane	103		81 - 121
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: 400-122488-A-12 MSD

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.52	U	50.0	42.9		ug/L		86	59 - 137	17	30
1,1,1-Trichloroethane	0.50	U	50.0	47.3		ug/L		95	57 - 142	11	30
1,1,2,2-Tetrachloroethane	0.50	U	50.0	38.6		ug/L		77	66 - 135	4	30
1,1,2-Trichloroethane	0.50	U	50.0	39.7		ug/L		79	66 - 131	12	30
1,1-Dichloroethane	0.50	U	50.0	46.1		ug/L		92	61 - 144	12	30
1,1-Dichloroethene	0.50	U	50.0	43.6		ug/L		87	54 - 147	9	30
1,1-Dichloropropene	0.50	U	50.0	44.3		ug/L		89	65 - 136	11	30
1,2,3-Trichlorobenzene	0.70	U	50.0	40.9		ug/L		82	43 - 145	16	30
1,2,3-Trichloropropane	0.84	U	50.0	39.7		ug/L		79	65 - 133	8	30
1,2,4-Trichlorobenzene	0.82	U	50.0	39.2		ug/L		78	39 - 148	21	30
1,2,4-Trimethylbenzene	0.82	U	50.0	37.8		ug/L		76	50 - 139	19	30
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	40.5		ug/L		81	45 - 135	1	30
1,2-Dichlorobenzene	0.50	U	50.0	38.2		ug/L		76	52 - 137	17	30
1,2-Dichloroethane	0.50	U	50.0	47.1		ug/L		94	60 - 141	10	30
1,2-Dichloropropane	0.50	U	50.0	43.8		ug/L		88	66 - 137	12	30
1,3,5-Trimethylbenzene	0.56	U	50.0	37.3		ug/L		75	52 - 135	20	30
1,3-Dichlorobenzene	0.54	U	50.0	37.5		ug/L		75	54 - 135	19	30
1,3-Dichloropropane	0.50	U	50.0	41.2		ug/L		82	66 - 133	11	30
1,4-Dichlorobenzene	0.64	U	50.0	37.2		ug/L		74	53 - 135	19	30
2,2-Dichloropropane	0.50	U	50.0	51.7		ug/L		103	42 - 144	10	31
2-Chlorotoluene	0.57	U	50.0	36.8		ug/L		74	53 - 134	17	30
2-Hexanone	3.1	U	200	173		ug/L		87	65 - 140	3	30
4-Chlorotoluene	0.56	U	50.0	37.0		ug/L		74	54 - 133	18	30
Acetone	36		200	218		ug/L		91	43 - 160	1	30
Benzene	0.38	U	50.0	43.1		ug/L		86	56 - 142	12	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122488-A-12 MSD

Matrix: Water

Analysis Batch: 308687

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	0.54	U	50.0	38.8		ug/L		78	59 - 136	17	30
Bromochloromethane	0.52	U	50.0	50.0		ug/L		100	64 - 140	9	30
Bromodichloromethane	0.50	U	50.0	46.4		ug/L		93	59 - 143	10	30
Bromoform	0.71	U	50.0	42.0		ug/L		84	50 - 140	8	30
Bromomethane	0.98	U	50.0	83.4	J3	ug/L		167	10 - 160	0	50
Carbon disulfide	0.50	U	50.0	45.5		ug/L		91	48 - 152	11	30
Carbon tetrachloride	0.50	U	50.0	50.2		ug/L		100	55 - 145	11	30
Chlorobenzene	0.50	U	50.0	39.2		ug/L		78	64 - 130	16	30
Chloroethane	0.76	U	50.0	55.2		ug/L		110	50 - 151	6	30
Chloroform	0.60	U	50.0	45.1		ug/L		90	60 - 141	12	30
Chloromethane	0.83	U	50.0	39.4		ug/L		79	49 - 148	7	31
cis-1,2-Dichloroethene	0.50	U	50.0	46.2		ug/L		92	59 - 143	12	30
cis-1,3-Dichloropropene	0.50	U	50.0	46.9		ug/L		94	57 - 140	12	30
Dibromochloromethane	0.50	U	50.0	42.4		ug/L		85	56 - 143	11	30
Dibromomethane	0.59	U	50.0	46.7		ug/L		93	63 - 138	8	30
Dichlorodifluoromethane	0.85	U	50.0	42.1		ug/L		84	16 - 160	7	31
Ethylbenzene	0.50	U	50.0	39.6		ug/L		79	58 - 131	18	30
Ethylene Dibromide	0.50	U	50.0	41.2		ug/L		82	64 - 132	10	30
Hexachlorobutadiene	0.90	U	50.0	38.4		ug/L		77	31 - 149	22	36
Iodomethane	0.68	U	50.0	58.4		ug/L		117	20 - 160	5	44
Isopropyl ether	0.70	U	50.0	44.4		ug/L		89	60 - 144	0	30
Isopropylbenzene	0.53	U	50.0	39.8		ug/L		80	56 - 133	19	30
Methyl Ethyl Ketone	2.6	U	200	196		ug/L		98	55 - 150	1	30
methyl isobutyl ketone	1.8	U	200	202		ug/L		101	63 - 146	2	30
Methyl tert-butyl ether	0.74	U	50.0	43.9		ug/L		88	59 - 137	5	30
Methylene Chloride	3.0	U	50.0	45.0		ug/L		90	60 - 146	10	32
m-Xylene & p-Xylene	1.6	U	50.0	39.9		ug/L		80	57 - 130	17	30
Naphthalene	1.0	U	50.0	41.2		ug/L		82	25 - 160	8	30
n-Butylbenzene	0.76	U	50.0	35.9		ug/L		72	41 - 142	20	31
N-Propylbenzene	0.69	U	50.0	36.5		ug/L		73	51 - 138	20	30
o-Xylene	0.60	U	50.0	40.2		ug/L		80	61 - 130	18	30
p-Cymene	0.71	U	50.0	37.4		ug/L		75	48 - 139	21	30
sec-Butylbenzene	0.70	U	50.0	36.5		ug/L		73	50 - 138	20	30
Styrene	1.0	U	50.0	40.1		ug/L		80	58 - 131	18	30
tert-Butylbenzene	0.63	U	50.0	36.3		ug/L		73	54 - 146	20	30
Tetrachloroethene	7.0		50.0	47.5		ug/L		81	52 - 133	13	30
Toluene	0.80	I	50.0	39.6		ug/L		78	65 - 130	16	30
trans-1,2-Dichloroethene	0.50	U	50.0	44.8		ug/L		90	61 - 143	10	30
trans-1,3-Dichloropropene	0.50	U	50.0	44.2		ug/L		88	53 - 133	13	30
Trichloroethene	0.50	U	50.0	43.5		ug/L		87	64 - 136	14	30
Trichlorofluoromethane	0.52	U	50.0	47.6		ug/L		95	54 - 156	5	30
Vinyl acetate	2.0	U	100	108		ug/L		108	26 - 160	2	33
Vinyl chloride	0.50	U	50.0	44.3		ug/L		89	46 - 152	8	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	96		78 - 118
Dibromofluoromethane	104		81 - 121
Toluene-d8 (Surr)	93		80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Lab Sample ID: MB 400-308873/13

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:08	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,1,2,2-Tetrachloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,1,2-Trichloroethane	0.50	U	5.0	0.50	ug/L			06/07/16 14:08	1
1,1-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,1-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,1-Dichloropropene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,2,3-Trichlorobenzene	0.70	U	1.0	0.70	ug/L			06/07/16 14:08	1
1,2,3-Trichloropropane	0.84	U	5.0	0.84	ug/L			06/07/16 14:08	1
1,2,4-Trichlorobenzene	0.82	U	1.0	0.82	ug/L			06/07/16 14:08	1
1,2,4-Trimethylbenzene	0.82	U	1.0	0.82	ug/L			06/07/16 14:08	1
1,2-Dibromo-3-Chloropropane	1.5	U	5.0	1.5	ug/L			06/07/16 14:08	1
1,2-Dichlorobenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,2-Dichloroethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,3,5-Trimethylbenzene	0.56	U	1.0	0.56	ug/L			06/07/16 14:08	1
1,3-Dichlorobenzene	0.54	U	1.0	0.54	ug/L			06/07/16 14:08	1
1,3-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
1,4-Dichlorobenzene	0.64	U	1.0	0.64	ug/L			06/07/16 14:08	1
2,2-Dichloropropane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
2-Chlorotoluene	0.57	U	1.0	0.57	ug/L			06/07/16 14:08	1
2-Hexanone	3.1	U	25	3.1	ug/L			06/07/16 14:08	1
4-Chlorotoluene	0.56	U	1.0	0.56	ug/L			06/07/16 14:08	1
Acetone	10	U	25	10	ug/L			06/07/16 14:08	1
Benzene	0.38	U	1.0	0.38	ug/L			06/07/16 14:08	1
Bromobenzene	0.54	U	1.0	0.54	ug/L			06/07/16 14:08	1
Bromochloromethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:08	1
Bromodichloromethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Bromoform	0.71	U	5.0	0.71	ug/L			06/07/16 14:08	1
Bromomethane	0.98	U	1.0	0.98	ug/L			06/07/16 14:08	1
Carbon disulfide	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Chlorobenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Chloroethane	0.76	U	1.0	0.76	ug/L			06/07/16 14:08	1
Chloroform	0.60	U	1.0	0.60	ug/L			06/07/16 14:08	1
Chloromethane	0.83	U	1.0	0.83	ug/L			06/07/16 14:08	1
cis-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
cis-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/07/16 14:08	1
Dibromochloromethane	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Dibromomethane	0.59	U	5.0	0.59	ug/L			06/07/16 14:08	1
Dichlorodifluoromethane	0.85	U	1.0	0.85	ug/L			06/07/16 14:08	1
Ethylbenzene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Ethylene Dibromide	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Hexachlorobutadiene	0.90	U	5.0	0.90	ug/L			06/07/16 14:08	1
Iodomethane	0.68	U	1.0	0.68	ug/L			06/07/16 14:08	1
Isopropyl ether	0.70	U	1.0	0.70	ug/L			06/07/16 14:08	1
Isopropylbenzene	0.53	U	1.0	0.53	ug/L			06/07/16 14:08	1
Methyl Ethyl Ketone	2.6	U	25	2.6	ug/L			06/07/16 14:08	1
methyl isobutyl ketone	1.8	U	25	1.8	ug/L			06/07/16 14:08	1
Methyl tert-butyl ether	0.74	U	1.0	0.74	ug/L			06/07/16 14:08	1

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-308873/13

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.0	U	5.0	3.0	ug/L			06/07/16 14:08	1
m-Xylene & p-Xylene	1.6	U	5.0	1.6	ug/L			06/07/16 14:08	1
Naphthalene	1.0	U	1.0	1.0	ug/L			06/07/16 14:08	1
n-Butylbenzene	0.76	U	1.0	0.76	ug/L			06/07/16 14:08	1
N-Propylbenzene	0.69	U	1.0	0.69	ug/L			06/07/16 14:08	1
o-Xylene	0.60	U	5.0	0.60	ug/L			06/07/16 14:08	1
p-Cymene	0.71	U	1.0	0.71	ug/L			06/07/16 14:08	1
sec-Butylbenzene	0.70	U	1.0	0.70	ug/L			06/07/16 14:08	1
Styrene	1.0	U	1.0	1.0	ug/L			06/07/16 14:08	1
tert-Butylbenzene	0.63	U	1.0	0.63	ug/L			06/07/16 14:08	1
Tetrachloroethene	0.58	U	1.0	0.58	ug/L			06/07/16 14:08	1
Toluene	0.70	U	1.0	0.70	ug/L			06/07/16 14:08	1
trans-1,2-Dichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
trans-1,3-Dichloropropene	0.50	U	5.0	0.50	ug/L			06/07/16 14:08	1
Trichloroethene	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1
Trichlorofluoromethane	0.52	U	1.0	0.52	ug/L			06/07/16 14:08	1
Vinyl acetate	2.0	U	25	2.0	ug/L			06/07/16 14:08	1
Vinyl chloride	0.50	U	1.0	0.50	ug/L			06/07/16 14:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		78 - 118		06/07/16 14:08	1
Dibromofluoromethane	105		81 - 121		06/07/16 14:08	1
Toluene-d8 (Surr)	92		80 - 120		06/07/16 14:08	1

Lab Sample ID: LCS 400-308873/1002

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	35.7		ug/L		71	67 - 131
1,1,1-Trichloroethane	50.0	55.1		ug/L		110	68 - 130
1,1,2,2-Tetrachloroethane	50.0	54.0		ug/L		108	70 - 131
1,1,2-Trichloroethane	50.0	52.7		ug/L		105	70 - 130
1,1-Dichloroethane	50.0	50.6		ug/L		101	70 - 130
1,1-Dichloroethene	50.0	59.2		ug/L		118	63 - 134
1,1-Dichloropropene	50.0	49.7		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	50.0	50.6		ug/L		101	60 - 138
1,2,3-Trichloropropane	50.0	53.3		ug/L		107	70 - 130
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,2,4-Trimethylbenzene	50.0	51.0		ug/L		102	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/L		101	54 - 135
1,2-Dichlorobenzene	50.0	52.4		ug/L		105	67 - 130
1,2-Dichloroethane	50.0	49.9		ug/L		100	69 - 130
1,2-Dichloropropane	50.0	49.5		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	53.7		ug/L		107	69 - 130
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	48.0		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	70 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308873/1002

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	50.0	51.3		ug/L		103	52 - 135
2-Chlorotoluene	50.0	49.5		ug/L		99	70 - 130
2-Hexanone	200	195		ug/L		98	65 - 137
4-Chlorotoluene	50.0	50.6		ug/L		101	70 - 130
Acetone	200	214		ug/L		107	43 - 160
Benzene	50.0	54.2		ug/L		108	70 - 130
Bromobenzene	50.0	52.5		ug/L		105	70 - 132
Bromochloromethane	50.0	55.4		ug/L		111	70 - 130
Bromodichloromethane	50.0	54.8		ug/L		110	67 - 133
Bromoform	50.0	42.8		ug/L		86	57 - 140
Bromomethane	50.0	51.7		ug/L		103	10 - 160
Carbon disulfide	50.0	54.2		ug/L		108	61 - 137
Carbon tetrachloride	50.0	52.7		ug/L		105	61 - 137
Chlorobenzene	50.0	44.9		ug/L		90	70 - 130
Chloroethane	50.0	60.1		ug/L		120	55 - 141
Chloroform	50.0	52.6		ug/L		105	69 - 130
Chloromethane	50.0	48.9		ug/L		98	58 - 137
cis-1,2-Dichloroethene	50.0	51.2		ug/L		102	68 - 130
cis-1,3-Dichloropropene	50.0	53.5		ug/L		107	69 - 132
Dibromochloromethane	50.0	53.8		ug/L		108	67 - 135
Dibromomethane	50.0	53.8		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	51.9		ug/L		104	41 - 146
Ethylbenzene	50.0	42.4		ug/L		85	70 - 130
Ethylene Dibromide	50.0	54.5		ug/L		109	70 - 130
Hexachlorobutadiene	50.0	47.9		ug/L		96	53 - 140
Iodomethane	50.0	40.8		ug/L		82	27 - 159
Isopropyl ether	50.0	54.0		ug/L		108	64 - 132
Isopropylbenzene	50.0	49.3		ug/L		99	70 - 130
Methyl Ethyl Ketone	200	225		ug/L		112	61 - 145
methyl isobutyl ketone	200	206		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	51.3		ug/L		103	66 - 130
Methylene Chloride	50.0	55.3		ug/L		111	66 - 135
m-Xylene & p-Xylene	50.0	47.9		ug/L		96	70 - 130
Naphthalene	50.0	51.6		ug/L		103	47 - 149
n-Butylbenzene	50.0	51.3		ug/L		103	67 - 130
N-Propylbenzene	50.0	50.3		ug/L		101	70 - 130
o-Xylene	50.0	47.9		ug/L		96	70 - 130
p-Cymene	50.0	49.2		ug/L		98	65 - 130
sec-Butylbenzene	50.0	52.6		ug/L		105	66 - 130
Styrene	50.0	48.7		ug/L		97	70 - 130
tert-Butylbenzene	50.0	51.7		ug/L		103	64 - 139
Tetrachloroethene	50.0	55.8		ug/L		112	65 - 130
Toluene	50.0	50.9		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	55.7		ug/L		111	70 - 130
trans-1,3-Dichloropropene	50.0	48.7		ug/L		97	63 - 130
Trichloroethene	50.0	56.6		ug/L		113	70 - 130
Trichlorofluoromethane	50.0	65.1		ug/L		130	65 - 138
Vinyl acetate	100	116		ug/L		116	26 - 160

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-308873/1002

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	50.0	52.1		ug/L		104	59 - 136
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	94		78 - 118				
Dibromofluoromethane	101		81 - 121				
Toluene-d8 (Surr)	97		80 - 120				

Lab Sample ID: 400-122491-A-2 MS

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.52	U	50.0	54.2		ug/L		108	59 - 137
1,1,1-Trichloroethane	0.50	U	50.0	59.4		ug/L		119	57 - 142
1,1,2,2-Tetrachloroethane	0.50	U	50.0	56.7		ug/L		113	66 - 135
1,1,2-Trichloroethane	0.50	U	50.0	55.8		ug/L		112	66 - 131
1,1-Dichloroethane	0.50	U	50.0	54.8		ug/L		110	61 - 144
1,1-Dichloroethene	0.50	U	50.0	64.0		ug/L		128	54 - 147
1,1-Dichloropropene	0.50	U	50.0	53.9		ug/L		108	65 - 136
1,2,3-Trichlorobenzene	0.70	U	50.0	54.0		ug/L		108	43 - 145
1,2,3-Trichloropropane	0.84	U	50.0	55.9		ug/L		112	65 - 133
1,2,4-Trichlorobenzene	0.82	U	50.0	56.2		ug/L		112	39 - 148
1,2,4-Trimethylbenzene	0.82	U	50.0	55.1		ug/L		110	50 - 139
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	50.1		ug/L		100	45 - 135
1,2-Dichlorobenzene	0.50	U	50.0	55.7		ug/L		111	52 - 137
1,2-Dichloroethane	0.50	U	50.0	53.2		ug/L		106	60 - 141
1,2-Dichloropropane	0.50	U	50.0	53.0		ug/L		106	66 - 137
1,3,5-Trimethylbenzene	0.56	U	50.0	58.1		ug/L		116	52 - 135
1,3-Dichlorobenzene	0.54	U	50.0	57.0		ug/L		114	54 - 135
1,3-Dichloropropane	0.50	U	50.0	50.8		ug/L		102	66 - 133
1,4-Dichlorobenzene	0.64	U	50.0	57.9		ug/L		116	53 - 135
2,2-Dichloropropane	0.50	U	50.0	55.3		ug/L		111	42 - 144
2-Chlorotoluene	0.57	U	50.0	54.3		ug/L		109	53 - 134
2-Hexanone	3.1	U	200	186		ug/L		93	65 - 140
4-Chlorotoluene	0.56	U	50.0	55.1		ug/L		110	54 - 133
Acetone	10	U	200	189		ug/L		94	43 - 160
Benzene	0.38	U	50.0	58.9		ug/L		118	56 - 142
Bromobenzene	0.54	U	50.0	56.7		ug/L		113	59 - 136
Bromochloromethane	0.52	U	50.0	58.8		ug/L		118	64 - 140
Bromodichloromethane	0.50	U	50.0	59.5		ug/L		119	59 - 143
Bromoform	0.71	U	50.0	53.3		ug/L		107	50 - 140
Bromomethane	0.98	U	50.0	51.9		ug/L		104	10 - 160
Carbon disulfide	0.50	U	50.0	58.4		ug/L		117	48 - 152
Carbon tetrachloride	0.50	U	50.0	56.6		ug/L		113	55 - 145
Chlorobenzene	0.50	U	50.0	55.0		ug/L		110	64 - 130
Chloroethane	0.76	U	50.0	64.1		ug/L		128	50 - 151
Chloroform	0.60	U	50.0	56.9		ug/L		114	60 - 141
Chloromethane	0.83	U	50.0	48.8		ug/L		98	49 - 148

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122491-A-2 MS

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	0.50	U	50.0	54.5		ug/L		109	59 - 143
cis-1,3-Dichloropropene	0.50	U	50.0	57.5		ug/L		115	57 - 140
Dibromochloromethane	0.50	U	50.0	57.1		ug/L		114	56 - 143
Dibromomethane	0.59	U	50.0	57.0		ug/L		114	63 - 138
Dichlorodifluoromethane	0.85	U	50.0	57.2		ug/L		114	16 - 160
Ethylbenzene	0.50	U	50.0	55.3		ug/L		111	58 - 131
Ethylene Dibromide	0.50	U	50.0	56.4		ug/L		113	64 - 132
Hexachlorobutadiene	0.90	U	50.0	51.6		ug/L		103	31 - 149
Iodomethane	0.68	U	50.0	57.8		ug/L		116	20 - 160
Isopropyl ether	0.70	U	50.0	53.9		ug/L		108	60 - 144
Isopropylbenzene	0.53	U	50.0	58.1		ug/L		116	56 - 133
Methyl Ethyl Ketone	2.6	U	200	209		ug/L		105	55 - 150
methyl isobutyl ketone	1.8	U	200	201		ug/L		100	63 - 146
Methyl tert-butyl ether	0.74	U	50.0	53.8		ug/L		108	59 - 137
Methylene Chloride	3.0	U	50.0	59.2		ug/L		118	60 - 146
m-Xylene & p-Xylene	1.6	U	50.0	56.1		ug/L		112	57 - 130
Naphthalene	1.0	U	50.0	55.0		ug/L		110	25 - 160
n-Butylbenzene	0.76	U	50.0	54.6		ug/L		109	41 - 142
N-Propylbenzene	0.69	U	50.0	54.6		ug/L		109	51 - 138
o-Xylene	0.60	U	50.0	56.6		ug/L		113	61 - 130
p-Cymene	0.71	U	50.0	52.5		ug/L		105	48 - 139
sec-Butylbenzene	0.70	U	50.0	56.8		ug/L		114	50 - 138
Styrene	1.0	U	50.0	55.4		ug/L		111	58 - 131
tert-Butylbenzene	0.63	U	50.0	56.3		ug/L		113	54 - 146
Tetrachloroethene	0.58	U	50.0	56.0		ug/L		112	52 - 133
Toluene	0.70	U	50.0	55.5		ug/L		111	65 - 130
trans-1,2-Dichloroethene	0.50	U	50.0	59.9		ug/L		120	61 - 143
trans-1,3-Dichloropropene	0.50	U	50.0	51.7		ug/L		103	53 - 133
Trichloroethene	0.50	U	50.0	61.1		ug/L		122	64 - 136
Trichlorofluoromethane	0.52	U	50.0	66.5		ug/L		133	54 - 156
Vinyl acetate	2.0	U	100	118		ug/L		118	26 - 160
Vinyl chloride	0.50	U	50.0	55.2		ug/L		110	46 - 152

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	103		78 - 118
Dibromofluoromethane	102		81 - 121
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 400-122491-A-2 MSD

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.52	U	50.0	54.9		ug/L		110	59 - 137	1	30
1,1,1-Trichloroethane	0.50	U	50.0	59.8		ug/L		120	57 - 142	1	30
1,1,2,2-Tetrachloroethane	0.50	U	50.0	59.8		ug/L		120	66 - 135	5	30
1,1,2-Trichloroethane	0.50	U	50.0	57.0		ug/L		114	66 - 131	2	30
1,1-Dichloroethane	0.50	U	50.0	51.0		ug/L		102	61 - 144	7	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122491-A-2 MSD

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	0.50	U	50.0	63.3		ug/L		127	54 - 147	1	30
1,1-Dichloropropene	0.50	U	50.0	54.5		ug/L		109	65 - 136	1	30
1,2,3-Trichlorobenzene	0.70	U	50.0	54.7		ug/L		109	43 - 145	1	30
1,2,3-Trichloropropane	0.84	U	50.0	57.8		ug/L		116	65 - 133	3	30
1,2,4-Trichlorobenzene	0.82	U	50.0	55.7		ug/L		111	39 - 148	1	30
1,2,4-Trimethylbenzene	0.82	U	50.0	54.4		ug/L		109	50 - 139	1	30
1,2-Dibromo-3-Chloropropane	1.5	U	50.0	56.3		ug/L		113	45 - 135	12	30
1,2-Dichlorobenzene	0.50	U	50.0	55.2		ug/L		110	52 - 137	1	30
1,2-Dichloroethane	0.50	U	50.0	54.0		ug/L		108	60 - 141	2	30
1,2-Dichloropropane	0.50	U	50.0	53.3		ug/L		107	66 - 137	1	30
1,3,5-Trimethylbenzene	0.56	U	50.0	57.1		ug/L		114	52 - 135	2	30
1,3-Dichlorobenzene	0.54	U	50.0	56.2		ug/L		112	54 - 135	1	30
1,3-Dichloropropane	0.50	U	50.0	51.5		ug/L		103	66 - 133	1	30
1,4-Dichlorobenzene	0.64	U	50.0	56.7		ug/L		113	53 - 135	2	30
2,2-Dichloropropane	0.50	U	50.0	54.3		ug/L		109	42 - 144	2	31
2-Chlorotoluene	0.57	U	50.0	55.3		ug/L		111	53 - 134	2	30
2-Hexanone	3.1	U	200	207		ug/L		103	65 - 140	11	30
4-Chlorotoluene	0.56	U	50.0	54.9		ug/L		110	54 - 133	0	30
Acetone	10	U	200	205		ug/L		102	43 - 160	8	30
Benzene	0.38	U	50.0	58.7		ug/L		117	56 - 142	0	30
Bromobenzene	0.54	U	50.0	56.1		ug/L		112	59 - 136	1	30
Bromochloromethane	0.52	U	50.0	58.7		ug/L		117	64 - 140	0	30
Bromodichloromethane	0.50	U	50.0	60.1		ug/L		120	59 - 143	1	30
Bromoform	0.71	U	50.0	56.5		ug/L		113	50 - 140	6	30
Bromomethane	0.98	U	50.0	56.5		ug/L		113	10 - 160	9	50
Carbon disulfide	0.50	U	50.0	57.8		ug/L		116	48 - 152	1	30
Carbon tetrachloride	0.50	U	50.0	57.3		ug/L		115	55 - 145	1	30
Chlorobenzene	0.50	U	50.0	55.1		ug/L		110	64 - 130	0	30
Chloroethane	0.76	U	50.0	62.7		ug/L		125	50 - 151	2	30
Chloroform	0.60	U	50.0	56.6		ug/L		113	60 - 141	1	30
Chloromethane	0.83	U	50.0	49.3		ug/L		99	49 - 148	1	31
cis-1,2-Dichloroethene	0.50	U	50.0	55.5		ug/L		111	59 - 143	2	30
cis-1,3-Dichloropropene	0.50	U	50.0	58.3		ug/L		117	57 - 140	1	30
Dibromochloromethane	0.50	U	50.0	57.6		ug/L		115	56 - 143	1	30
Dibromomethane	0.59	U	50.0	58.2		ug/L		116	63 - 138	2	30
Dichlorodifluoromethane	0.85	U	50.0	55.9		ug/L		112	16 - 160	2	31
Ethylbenzene	0.50	U	50.0	55.1		ug/L		110	58 - 131	0	30
Ethylene Dibromide	0.50	U	50.0	59.3		ug/L		119	64 - 132	5	30
Hexachlorobutadiene	0.90	U	50.0	52.1		ug/L		104	31 - 149	1	36
Iodomethane	0.68	U	50.0	55.8		ug/L		112	20 - 160	3	44
Isopropyl ether	0.70	U	50.0	52.9		ug/L		106	60 - 144	2	30
Isopropylbenzene	0.53	U	50.0	58.0		ug/L		116	56 - 133	0	30
Methyl Ethyl Ketone	2.6	U	200	235		ug/L		117	55 - 150	11	30
methyl isobutyl ketone	1.8	U	200	226		ug/L		113	63 - 146	12	30
Methyl tert-butyl ether	0.74	U	50.0	55.1		ug/L		110	59 - 137	2	30
Methylene Chloride	3.0	U	50.0	58.9		ug/L		118	60 - 146	1	32
m-Xylene & p-Xylene	1.6	U	50.0	55.7		ug/L		111	57 - 130	1	30
Naphthalene	1.0	U	50.0	57.3		ug/L		115	25 - 160	4	30

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-122491-A-2 MSD

Matrix: Water

Analysis Batch: 308873

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	0.76	U	50.0	53.7		ug/L		107	41 - 142	2	31
N-Propylbenzene	0.69	U	50.0	53.9		ug/L		108	51 - 138	1	30
o-Xylene	0.60	U	50.0	56.8		ug/L		114	61 - 130	0	30
p-Cymene	0.71	U	50.0	52.8		ug/L		106	48 - 139	1	30
sec-Butylbenzene	0.70	U	50.0	55.9		ug/L		112	50 - 138	2	30
Styrene	1.0	U	50.0	56.1		ug/L		112	58 - 131	1	30
tert-Butylbenzene	0.63	U	50.0	55.5		ug/L		111	54 - 146	2	30
Tetrachloroethene	0.58	U	50.0	55.9		ug/L		112	52 - 133	0	30
Toluene	0.70	U	50.0	55.1		ug/L		110	65 - 130	1	30
trans-1,2-Dichloroethene	0.50	U	50.0	58.8		ug/L		118	61 - 143	2	30
trans-1,3-Dichloropropene	0.50	U	50.0	52.8		ug/L		106	53 - 133	2	30
Trichloroethene	0.50	U	50.0	61.2		ug/L		122	64 - 136	0	30
Trichlorofluoromethane	0.52	U	50.0	66.2		ug/L		132	54 - 156	1	30
Vinyl acetate	2.0	U	100	114		ug/L		114	26 - 160	4	33
Vinyl chloride	0.50	U	50.0	53.4		ug/L		107	46 - 152	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	102		78 - 118
Dibromofluoromethane	104		81 - 121
Toluene-d8 (Surr)	99		80 - 120

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 400-308303/1-A ^5

Matrix: Water

Analysis Batch: 308895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 308303

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	U	2.5	0.85	ug/L		06/03/16 08:45	06/06/16 16:33	5

Lab Sample ID: LCS 400-308303/2-A ^1

Matrix: Water

Analysis Batch: 308895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 308303

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	56.5		ug/L		113	85 - 115

Lab Sample ID: 400-122209-F-1-B MS ^5

Matrix: Water

Analysis Batch: 308895

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 308303

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.85	U	50.0	56.7		ug/L		113	70 - 130

TestAmerica Pensacola

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-122209-F-1-C MSD ^5

Matrix: Water

Analysis Batch: 308895

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 308303

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.85	U	50.0	56.0		ug/L	—	112	70 - 130	1	20

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

GC/MS VOA

Analysis Batch: 308608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-1	C5ES-MW0010I-022.5-20160527	Total/NA	Water	8260B	
400-122302-1 MS	C5ES-MW0010I-022.5-20160527	Total/NA	Water	8260B	
400-122302-1 MSD	C5ES-MW0010I-022.5-20160527	Total/NA	Water	8260B	
400-122302-2	C5ES-MW0012S-012.5-20160527	Total/NA	Water	8260B	
400-122302-3	C5ES-MW0012I-022.5-20160527	Total/NA	Water	8260B	
400-122302-5	C5ES-MW0018S-009.5-20160527	Total/NA	Water	8260B	
400-122302-6	C5ES-MW0019I-018.0-20160527	Total/NA	Water	8260B	
400-122302-9	MLPV-IW0006IR-030.5-20160526	Total/NA	Water	8260B	
400-122302-10	MLPV-IW0009I-030.5-20160526	Total/NA	Water	8260B	
400-122302-11	MLPV-IW0009D-047.5-20160526	Total/NA	Water	8260B	
400-122302-12	MLPV-IW0012I-037.5-20160526	Total/NA	Water	8260B	
400-122302-13	MLPV-IW0012D-047.5-20160526	Total/NA	Water	8260B	
400-122302-14	MLPV-IW0018D-052.5-20160525	Total/NA	Water	8260B	
400-122302-15	MLPV-IW0028I-030.5-20160526	Total/NA	Water	8260B	
400-122302-16	MLPV-IW0029D-044.5-20160526	Total/NA	Water	8260B	
400-122302-17	MLPV-IW0046-040.0-20160526	Total/NA	Water	8260B	
400-122302-18	MLPV-IW0047-040.0-20160526	Total/NA	Water	8260B	
400-122302-19	MLPV-IW0048-045.0-20160526	Total/NA	Water	8260B	
400-122302-37	MLPV-SAMW0001-045.5-20160524	Total/NA	Water	8260B	
400-122302-38	MLPV-SAMW0003-045.5-20160524	Total/NA	Water	8260B	
LCS 400-308608/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-308608/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 308665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-4	C5ES-MW0017S-009.5-20160527	Total/NA	Water	8260B	
400-122302-4 MS	C5ES-MW0017S-009.5-20160527	Total/NA	Water	8260B	
400-122302-4 MSD	C5ES-MW0017S-009.5-20160527	Total/NA	Water	8260B	
400-122302-20	MLPV-IW0049-043.0-20160525	Total/NA	Water	8260B	
400-122302-21	MLPV-IW0050-045.0-20160525	Total/NA	Water	8260B	
400-122302-22	MLPV-IW0051-050.0-20160525	Total/NA	Water	8260B	
400-122302-23	MLPV-IW0052-045.0-20160526	Total/NA	Water	8260B	
400-122302-24	MLPV-IW0053-040.0-20160526	Total/NA	Water	8260B	
400-122302-25	MPLV-IW0054-045.0-20160526	Total/NA	Water	8260B	
400-122302-27	MPLV-IW0056-035.0-20160525	Total/NA	Water	8260B	
400-122302-28	PCCA-MW0004-010.0-20160525	Total/NA	Water	8260B	
400-122302-29	PCCA-MW0017-020.0-20160525	Total/NA	Water	8260B	
400-122302-30	PRES-IW0007I-034.5-20160525	Total/NA	Water	8260B	
400-122302-31	PRES-IW0009-045.0-20160525	Total/NA	Water	8260B	
400-122302-32	PRES-IW0010-045.0-20160525	Total/NA	Water	8260B	
400-122302-33	SATV-IW0009I-024.5-20160525	Total/NA	Water	8260B	
400-122302-34	SATV-IW0010-040.0-20160525	Total/NA	Water	8260B	
400-122302-35	WCPS-IW0001SR-007.5-20160526	Total/NA	Water	8260B	
400-122302-36	WCPS-IW0016-020.0-20160526	Total/NA	Water	8260B	
LCS 400-308665/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-308665/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 308685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-46	FDTL-IW0015S-010.0-20160526	Total/NA	Water	8260B	
400-122302-47	FDTL-IW0017I-015.0-20160526	Total/NA	Water	8260B	

TestAmerica Pensacola

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

GC/MS VOA (Continued)

Analysis Batch: 308685 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-48	FDTL-IW0019I-015.0-20160526	Total/NA	Water	8260B	
400-122302-49	TRIP BLANK	Total/NA	Water	8260B	
400-122450-A-5 MS	Matrix Spike	Total/NA	Water	8260B	
400-122450-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 400-308685/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-308685/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 308687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-39	FS6-MW0001-030.0-20160525	Total/NA	Water	8260B	
400-122302-40	FS6-MW0003-025.0-20160525	Total/NA	Water	8260B	
400-122302-41	FDTL-IW0007I-015.0-20160526	Total/NA	Water	8260B	
400-122302-42	FDTL-IW0008I-015.0-20160526	Total/NA	Water	8260B	
400-122302-43	FDTL-IW0009I-015.0-20160526	Total/NA	Water	8260B	
400-122302-44	FDTL-IW0013I-015.0-20160526	Total/NA	Water	8260B	
400-122302-45	FDTL-IW0014I-015.0-20160526	Total/NA	Water	8260B	
400-122488-A-12 MS	Matrix Spike	Total/NA	Water	8260B	
400-122488-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 400-308687/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-308687/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 308873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122302-26	MPLV-IW0055-045.0-20160525	Total/NA	Water	8260B	
400-122491-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
400-122491-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 400-308873/1002	Lab Control Sample	Total/NA	Water	8260B	
MB 400-308873/13	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 308303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122209-F-1-B MS ^5	Matrix Spike	Total/NA	Water	200.8	
400-122209-F-1-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.8	
400-122302-7 - RA	SFOC-IW0001S-008.5-20160524	Total/NA	Water	200.8	
400-122302-8 - RA	SFOC-IW0004S-007.5-20160524	Total/NA	Water	200.8	
LCS 400-308303/2-A ^1	Lab Control Sample	Total/NA	Water	200.8	
MB 400-308303/1-A ^5	Method Blank	Total/NA	Water	200.8	

Analysis Batch: 308895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122209-F-1-B MS ^5	Matrix Spike	Total/NA	Water	200.8	308303
400-122209-F-1-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	200.8	308303
400-122302-7 - RA	SFOC-IW0001S-008.5-20160524	Total/NA	Water	200.8	308303
400-122302-8 - RA	SFOC-IW0004S-007.5-20160524	Total/NA	Water	200.8	308303
LCS 400-308303/2-A ^1	Lab Control Sample	Total/NA	Water	200.8	308303
MB 400-308303/1-A ^5	Method Blank	Total/NA	Water	200.8	308303

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: C5ES-MW0010I-022.5-20160527

Lab Sample ID: 400-122302-1

Date Collected: 05/27/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 12:50	WPD	TAL PEN

Client Sample ID: C5ES-MW0012S-012.5-20160527

Lab Sample ID: 400-122302-2

Date Collected: 05/27/16 11:30

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 13:15	WPD	TAL PEN

Client Sample ID: C5ES-MW0012I-022.5-20160527

Lab Sample ID: 400-122302-3

Date Collected: 05/27/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 13:39	WPD	TAL PEN

Client Sample ID: C5ES-MW0017S-009.5-20160527

Lab Sample ID: 400-122302-4

Date Collected: 05/27/16 11:15

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 08:47	WPD	TAL PEN

Client Sample ID: C5ES-MW0018S-009.5-20160527

Lab Sample ID: 400-122302-5

Date Collected: 05/27/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 14:27	WPD	TAL PEN

Client Sample ID: C5ES-MW0019I-018.0-20160527

Lab Sample ID: 400-122302-6

Date Collected: 05/27/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 14:51	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: SFOC-IW0001S-008.5-20160524

Lab Sample ID: 400-122302-7

Date Collected: 05/24/16 10:59

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8	RA		308303	06/03/16 08:45	RJB	TAL PEN
Total/NA	Analysis	200.8	RA	5	308895	06/06/16 17:05	GKP	TAL PEN

Client Sample ID: SFOC-IW0004S-007.5-20160524

Lab Sample ID: 400-122302-8

Date Collected: 05/24/16 10:08

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8	RA		308303	06/03/16 08:45	RJB	TAL PEN
Total/NA	Analysis	200.8	RA	5	308895	06/06/16 17:27	GKP	TAL PEN

Client Sample ID: MLPV-IW0006IR-030.5-20160526

Lab Sample ID: 400-122302-9

Date Collected: 05/26/16 09:50

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 15:17	WPD	TAL PEN

Client Sample ID: MLPV-IW0009I-030.5-20160526

Lab Sample ID: 400-122302-10

Date Collected: 05/26/16 10:10

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 15:43	WPD	TAL PEN

Client Sample ID: MLPV-IW0009D-047.5-20160526

Lab Sample ID: 400-122302-11

Date Collected: 05/26/16 10:15

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 16:09	WPD	TAL PEN

Client Sample ID: MLPV-IW0012I-037.5-20160526

Lab Sample ID: 400-122302-12

Date Collected: 05/26/16 10:35

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 16:36	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0012D-047.5-20160526

Lab Sample ID: 400-122302-13

Date Collected: 05/26/16 10:40

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 17:01	WPD	TAL PEN

Client Sample ID: MLPV-IW0018D-052.5-20160525

Lab Sample ID: 400-122302-14

Date Collected: 05/25/16 14:43

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 17:28	WPD	TAL PEN

Client Sample ID: MLPV-IW0028I-030.5-20160526

Lab Sample ID: 400-122302-15

Date Collected: 05/26/16 11:00

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 17:54	WPD	TAL PEN

Client Sample ID: MLPV-IW0029D-044.5-20160526

Lab Sample ID: 400-122302-16

Date Collected: 05/26/16 10:50

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 18:20	WPD	TAL PEN

Client Sample ID: MLPV-IW0046-040.0-20160526

Lab Sample ID: 400-122302-17

Date Collected: 05/26/16 10:55

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 18:46	WPD	TAL PEN

Client Sample ID: MLPV-IW0047-040.0-20160526

Lab Sample ID: 400-122302-18

Date Collected: 05/26/16 11:10

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 19:11	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-IW0048-045.0-20160526

Lab Sample ID: 400-122302-19

Date Collected: 05/26/16 11:25

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 19:37	WPD	TAL PEN

Client Sample ID: MLPV-IW0049-043.0-20160525

Lab Sample ID: 400-122302-20

Date Collected: 05/25/16 14:34

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 10:25	WPD	TAL PEN

Client Sample ID: MLPV-IW0050-045.0-20160525

Lab Sample ID: 400-122302-21

Date Collected: 05/25/16 14:58

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 10:50	WPD	TAL PEN

Client Sample ID: MLPV-IW0051-050.0-20160525

Lab Sample ID: 400-122302-22

Date Collected: 05/25/16 15:10

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 11:15	WPD	TAL PEN

Client Sample ID: MLPV-IW0052-045.0-20160526

Lab Sample ID: 400-122302-23

Date Collected: 05/26/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 11:39	WPD	TAL PEN

Client Sample ID: MLPV-IW0053-040.0-20160526

Lab Sample ID: 400-122302-24

Date Collected: 05/26/16 10:20

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 12:03	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MPLV-IW0054-045.0-20160526

Lab Sample ID: 400-122302-25

Date Collected: 05/26/16 11:20

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 12:29	WPD	TAL PEN

Client Sample ID: MPLV-IW0055-045.0-20160525

Lab Sample ID: 400-122302-26

Date Collected: 05/25/16 16:08

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308873	06/07/16 14:34	WPD	TAL PEN

Client Sample ID: MPLV-IW0056-035.0-20160525

Lab Sample ID: 400-122302-27

Date Collected: 05/25/16 14:21

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 13:21	WPD	TAL PEN

Client Sample ID: PCCA-MW0004-010.0-20160525

Lab Sample ID: 400-122302-28

Date Collected: 05/25/16 15:48

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 13:47	WPD	TAL PEN

Client Sample ID: PCCA-MW0017-020.0-20160525

Lab Sample ID: 400-122302-29

Date Collected: 05/25/16 15:56

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 14:13	WPD	TAL PEN

Client Sample ID: PRES-IW0007I-034.5-20160525

Lab Sample ID: 400-122302-30

Date Collected: 05/25/16 14:07

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 14:39	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: PRES-IW0009-045.0-20160525

Lab Sample ID: 400-122302-31

Date Collected: 05/25/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 15:05	WPD	TAL PEN

Client Sample ID: PRES-IW0010-045.0-20160525

Lab Sample ID: 400-122302-32

Date Collected: 05/25/16 13:53

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 15:31	WPD	TAL PEN

Client Sample ID: SATV-IW0009I-024.5-20160525

Lab Sample ID: 400-122302-33

Date Collected: 05/25/16 15:28

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 15:57	WPD	TAL PEN

Client Sample ID: SATV-IW00010-040.0-20160525

Lab Sample ID: 400-122302-34

Date Collected: 05/25/16 15:40

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 16:23	WPD	TAL PEN

Client Sample ID: WCPS-IW0001SR-007.5-20160526

Lab Sample ID: 400-122302-35

Date Collected: 05/26/16 11:45

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 16:49	WPD	TAL PEN

Client Sample ID: WCPS-IW0016-020.0-20160526

Lab Sample ID: 400-122302-36

Date Collected: 05/26/16 11:40

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308665	06/05/16 17:15	WPD	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: MLPV-SAMW0001-045.5-20160524

Lab Sample ID: 400-122302-37

Date Collected: 05/24/16 11:55

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 10:49	WPD	TAL PEN

Client Sample ID: MLPV-SAMW0003-045.5-20160524

Lab Sample ID: 400-122302-38

Date Collected: 05/24/16 13:19

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308608	06/04/16 11:14	WPD	TAL PEN

Client Sample ID: FS6-MW0001-030.0-20160525

Lab Sample ID: 400-122302-39

Date Collected: 05/25/16 10:03

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 16:48	CLN	TAL PEN

Client Sample ID: FS6-MW0003-025.0-20160525

Lab Sample ID: 400-122302-40

Date Collected: 05/25/16 10:24

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 17:15	CLN	TAL PEN

Client Sample ID: FDTL-IW0007I-015.0-20160526

Lab Sample ID: 400-122302-41

Date Collected: 05/26/16 13:15

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 17:41	CLN	TAL PEN

Client Sample ID: FDTL-IW0008I-015.0-20160526

Lab Sample ID: 400-122302-42

Date Collected: 05/26/16 13:35

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 18:08	CLN	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: FDTL-IW0009I-015.0-20160526

Lab Sample ID: 400-122302-43

Date Collected: 05/26/16 13:05

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 18:34	CLN	TAL PEN

Client Sample ID: FDTL-IW0013I-015.0-20160526

Lab Sample ID: 400-122302-44

Date Collected: 05/26/16 14:05

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 19:00	CLN	TAL PEN

Client Sample ID: FDTL-IW0014I-015.0-20160526

Lab Sample ID: 400-122302-45

Date Collected: 05/26/16 14:00

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308687	06/06/16 19:26	CLN	TAL PEN

Client Sample ID: FDTL-IW0015S-010.0-20160526

Lab Sample ID: 400-122302-46

Date Collected: 05/26/16 13:20

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308685	06/06/16 10:36	CLN	TAL PEN

Client Sample ID: FDTL-IW0017I-015.0-20160526

Lab Sample ID: 400-122302-47

Date Collected: 05/26/16 14:15

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308685	06/06/16 11:02	CLN	TAL PEN

Client Sample ID: FDTL-IW0019I-015.0-20160526

Lab Sample ID: 400-122302-48

Date Collected: 05/26/16 13:30

Matrix: Water

Date Received: 05/28/16 09:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308685	06/06/16 11:26	CLN	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Client Sample ID: TRIP BLANK
Date Collected: 05/28/16 00:00
Date Received: 05/28/16 09:48

Lab Sample ID: 400-122302-49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	308685	06/06/16 10:12	CLN	TAL PEN

Laboratory References:
TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Laboratory: TestAmerica Pensacola

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81010	06-30-16

1

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Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VAB-LTM

TestAmerica Job ID: 400-122302-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
200.8	Metals (ICP/MS)	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Mobile

6712 Benjamin Road
Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

Geosyntec Consultants 6770 S. Washington Ave. Titusville, FL 32780 Phone: 321-269-5880 Fax: 321-269-5813 Project Name: VAB LTM (FR0749D) <i>6/02</i> Site: MLPV, Kennedy Space Center PO #		Client Contact		Project Manager: Crystal Towns Tel/Fax: 850-483-5102		Site Contact: Lab Contact: Amy Atkins		Date: Carrier:		COC No: 1 of 4 COCs	
Analysis Turnaround Time Calendar (C) or Work Days (W) <u>W</u> TAT if different from Below <u>standard</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Total Antimony, 1x 250 mL PE VOCs (8260B), 3x 40mL CG 400-122302 COC		
C5ES-MW00101-022.5-20160527		5/27/16	11:00	G	W	3	N	3			
C5ES-MW0012S-012.5-20160527		5/28/16	11:30	G	W	3	N	3			
C5ES-MW0012I-022.5-20160527		5/29/16	11:15	G	W	3	N	3			
C5ES-MW0017S-009.5-2016527		5/30/16	11:15	G	W	3	N	3			
C5ES-MW0018S-009.5-20160527		5/31/16	11:10	G	W	3	N	3			
C5ES-MW0019I-018.0-20160527		6/1/16	11:20	G	W	3	N	3			
SFOC-IW0001S-008.5-20160524		5/24/16	10:59	G	W	1	N	1			
SFOC-IW0004S-007.5-20160524		5/24/16	10:08	G	W	1	N	1			
MLPV-IW0006IR-030.5-20160526		5/26/16	09:50	G	W	3	N	3			
MLPV-IW0009I-030.5-20160526		5/26/16	10:10	G	W	3	N	3			
MLPV-IW0009D-047.5-20160526		5/26/16	10:15	G	W	3	N	3			
MLPV-IW0012I-037.5-20160526		5/26/16	10:35	G	W	3	N	3			
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other		2		4							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements & Comments: Use full sample name on COC. Email EDDs to Crystal Towns (ctowns@geosyntec.com)											
Relinquished by: <i>Benjamin</i>		Company: Geosyntec		Date/Time: 5/27/16 12:48		Received by: <i>Jeffrey</i>		Company: <i>TA</i>		Date/Time: 5/27/16 12:48	
Relinquished by: <i>Annabeth</i>		Company: <i>TA</i>		Date/Time: 5/27/16 13:48		Received by: <i>Jeffrey</i>		Company: <i>TA</i>		Date/Time: 5/28/16 09:18	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	

830-Orlando

0.9%, 0.7% JN 6

TestAmerica Mobile

6712 Benjamin Road

Suite 100

Tampa, FL 33634

Phone (813) 885-7427 Fax (813) 885-7049

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Crystal Towns		Site Contact:		Date:	
Geosyntec Consultants		Tel/Fax: 850-483-5102		Lab Contact: Amy Atkins		Carrier:	
6770 S. Washington Ave.		Analysis Turnaround Time		Calendar (C) or Work Days (W)		Job No.	
Titusville, FL 32780		TAT: if different from below, standard		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		SDG No.	
Phone: 321-269-5880		Project Name: VAB LTM (FR0749D) 102		Total Anthimony, 1x 250 mL PE		Sample Specific Notes:	
Fax 321-269-5813		Site: MLPV, Kennedy Space Center		VOCs (8260B), 3x 40mL CG			
P O #							
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.		
MLPV-IW0012D-047.5-20160526	5/26/16	10:40	G	W	3		
MLPV-IW0018D-052.5-20160525	5/25/16	14:43	G	W	3		
MLPV-IW0028H-030.5-20160526	5/26/16	11:00	G	W	3		
MLPV-IW0029D-044.5-20160526	5/26/16	10:50	G	W	3		
MLPV-IW0046-040.0-20160526	5/26/16	10:55	G	W	3		
MLPV-IW0047-040.0-20160526	5/26/16	11:10	G	W	3		
MLPV-IW0048-045.0-20160526	5/26/16	11:25	G	W	3		
MLPV-IW0049-043.0-20160525	5/25/16	14:34	G	W	3		
MLPV-IW0050-045.0-20160525	5/25/16	14:58	G	W	3		
MLPV-IW0051-050.0-20160525	5/25/16	15:10	G	W	3		
MLPV-IW0052-045.0-20160526	5/26/16	11:55	G	W	3		
MLPV-IW0053-040.0-20160526	5/26/16	10:20	G	W	3		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>[Signature]</i>	Geosyntec	5/26/16 12:48	<i>[Signature]</i>	TestAmerica	5/27/16 11:26
<i>[Signature]</i>	TestAmerica	5/26/16 13:45	<i>[Signature]</i>	TestAmerica	5/28/16 09:48
<i>[Signature]</i>	TestAmerica		<i>[Signature]</i>	TestAmerica	

830-Orlando

122302

TestAmerica Mobile

6712 Benjamin Road
Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact		Project Manager: Crystal Towns		Site Contact:		Date:	
Geosyntec Consultants		Tel/Fax: 850-483-5102		Lab Contact: Amy Atkins		Carrier:	
6770 S. Washington Ave.		Analysis Turnaround Time		Job No.		COC No. 3 of 4 COCs	
Titusville, FL 32780		Calendar (C) or Work Days (W) W		SDG No.			
Phone: 321-269-5880		TAT if different from Below standard		Sample Specific Notes:			
Fax 321-269-5813		<input type="checkbox"/> 2 weeks					
Project Name: VAB LTM (FR0749D/02)		<input type="checkbox"/> 1 week					
Site: MLPV, Kennedy Space Center		<input type="checkbox"/> 2 days					
P O #		<input type="checkbox"/> 1 day					

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.
MLPV-IW0054-045.0-20160526	5/26/16	11:20	G	W	3
MLPV-IW0055-045.0-20160525	5/25/16	16:08	G	W	3
MLPV-IW0056-035.0-20160525	5/25/16	14:21	G	W	3
PCCA-MW0004-010.0-20160525	5/25/16	15:48	G	W	3
PCCA-MW0017-020.0-20160525	5/25/16	15:56	G	W	3
PRES-IW0007-034.5-20160525	5/25/16	14:07	G	W	3
PRES-IW0009-045.0-20160525	5/25/16	11:45	G	W	3
PRES-IW0010-045.0-20160525	5/25/16	13:53	G	W	3
SATV-IW0009I-024.5-20160525	5/25/16	15:28	G	W	3
SATV-IW00010-040.0-20160525	5/25/16	15:40	G	W	3
WCPS-IW0001SR-007.5-20160526	5/26/16	11:45	G	W	3
WCPS-IW0016-020.0-20160526	5/26/16	11:40	G	W	3

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Non-Hazard, Flammable, Skin Irritant, Polson B, Unknown

Special Instructions/QC Requirements & Comments:

Relinquished by: <i>[Signature]</i>	Company: Geosyntec	Date/Time: 5/27/16 12:48	Received by: <i>[Signature]</i>	Company: <i>[Signature]</i>	Date/Time: 5/27/16 12:48
Relinquished by: <i>[Signature]</i>	Company: <i>[Signature]</i>	Date/Time: 5/28/16 13:16	Received by: <i>[Signature]</i>	Company: <i>[Signature]</i>	Date/Time: 5/28/16 09:48
Relinquished by: <i>[Signature]</i>	Company: <i>[Signature]</i>	Date/Time:	Received by:	Company:	Date/Time:

530-Orlando

TestAmerica Mobile

6712 Benjamin Road

Suite 100

Tampa, FL 33634

Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Crystal Towns		Site Contact:		COC No:	
Geosyntec Consultants		Tel/Fax: 850-483-5102		Lab Contact: Amy Atkins		Job No.	
6770 S. Washington Ave.		Analysis Turnaround Time		Carrier:		COCs	
Titusville, FL 32780		Calendar (C) or Work Days (W) _____					
Phone: 321-269-5880		TAT if different from Below _____					
Fax 321-269-5813		<input type="checkbox"/> 2 weeks					
Project Name: VAB LTM (FR0749D) 102		<input type="checkbox"/> 1 week					
Site: MLPV, Kennedy Space Center		<input type="checkbox"/> 2 days					
P O #		<input type="checkbox"/> 1 day					
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Tested Sample	Sample Specific Notes:
MLPV-SAMW0001-045.5-20160524	5/24/16	11:55	G	W	3	N 3	
MLPV-SAMW0003-045.5-20160524	5/24/16	13:19	G	W	3	N 3	
FS6-MW0001-030.0-20160525	5/25/16	10:03	G	W	3	N 3	
FS6-MW0003-025.0-20160525	5/25/16	10:24	G	W	3	N 3	
FDTL-IW00071-015.0-20160526	5/26/16	13:15	G	W	3	N 3	
FDTL-IW00081-015.0-20160526	5/26/16	13:35	G	W	3	N 3	
FDTL-IW00091-015.0-20160526	5/26/16	13:05	G	W	3	N 3	
FDTL-IW00131-015.0-20160526	5/26/16	14:05	G	W	3	N 3	
FDTL-IW00141-015.0-20160526	5/26/16	14:00	G	W	3	N 3	
FDTL-IW0015S-010.0-20160526	5/26/16	13:20	G	W	3	N 3	
FDTL-IW00171-015.0-20160526	5/26/16	14:15	G	W	3	N 3	
FDTL-IW00191-015.0-20160526	5/26/16	13:30	G	W	3	N 3	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other							2
Possible Hazard Identification							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Non-Hazard		Flammable		Skin Irritant		Return To Client	
Toxic		Poison B		Unknown		Disposal By Lab	
Special Instructions/QC Requirements & Comments:							Archive For
							Months

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>[Signature]</i>	Geosyntec	5/27/16 12:48	<i>[Signature]</i>	TestAmerica	5/27/16 12:48
<i>[Signature]</i>	Geosyntec	5/28/16 13:45	<i>[Signature]</i>	TestAmerica	5/28/16 09:48
<i>[Signature]</i>	Geosyntec		<i>[Signature]</i>	TestAmerica	

530-Orlando

530-Orlando

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 400-122302-1

Login Number: 122302

List Source: TestAmerica Pensacola

List Number: 1

Creator: Crawford, Lauren E

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C, 0.7°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D

MAROS OUTPUT

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name:

Location: Kennedy Space Center

State: Florida

Time Period: 12/15/1997 to 5/28/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
VINYL CHLORIDE								
C5ES-MW12I	S	28	24	1.21	-226	100.0%	No	D
C5ES-MW10I	S	28	24	1.34	-179	100.0%	No	D
C5ES-MW19I	T	13	13	0.44	-21	88.6%	No	S
C5ES-MW18S	T	27	27	0.51	98	97.9%	No	I
C5ES-MW17S	T	27	23	1.44	-270	100.0%	No	D
C5ES-MW12S	T	28	23	2.71	-155	99.9%	No	D

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 5/14/2009 to 5/28/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
VINYL CHLORIDE								
C5ES-MW12S	S	10	6	1.10	-6	66.8%	No	NT
C5ES-MW12I	S	10	7	1.10	-28	99.4%	No	D
C5ES-MW10I	S	10	8	1.81	-27	99.2%	No	D
C5ES-MW19I	T	10	10	0.51	6	66.8%	No	NT
C5ES-MW18S	T	10	10	0.43	-18	93.4%	No	PD
C5ES-MW17S	T	10	7	1.05	-36	100.0%	No	D

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 5/9/2011 to 5/28/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
VINYL CHLORIDE								
C5ES-MW17S	S	6	3	0.92	-10	95.2%	No	D
C5ES-MW12S	S	6	3	1.40	-6	81.5%	No	NT
C5ES-MW12I	S	6	3	1.07	-8	89.8%	No	NT
C5ES-MW10I	S	6	4	1.13	-5	76.5%	No	NT
C5ES-MW19I	T	6	6	0.67	-8	89.8%	No	S
C5ES-MW18S	T	6	6	0.46	-7	86.4%	No	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 11/28/2012 to 5/28/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
VINYL CHLORIDE								
C5ES-MW12S	S	4	1	1.71	-1	50.0%	No	NT
C5ES-MW12I	S	4	1	1.46	-1	50.0%	No	NT
C5ES-MW10I	S	4	3	1.24	-6	95.8%	No	D
C5ES-MW19I	T	4	4	0.95	-2	62.5%	No	S
C5ES-MW18S	T	4	4	0.61	-6	95.8%	No	D
C5ES-MW17S	T	4	1	0.61	-1	50.0%	No	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 3/1/2006 to 5/1/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
TRICHLOROETHYLENE (TCE)								
FDTL-IW17I	S	8	4	1.76	7	76.4%	No	NT
FDTL-IW14I	S	11	4	1.39	-14	84.0%	No	NT
FDTL-IW15S	S	14	5	1.51	-4	56.4%	No	NT
FDTL-IW13I	S	12	10	0.84	-37	99.5%	No	D
FDTL-IW19I	T	10	7	3.02	-30	99.7%	No	D
FDTL-IW7I	T	16	16	1.95	-77	100.0%	No	D
FDTL-IW8I	T	7	7	1.33	-21	100.0%	No	D
FDTL-IW9I	T	14	14	1.20	-27	92.1%	No	PD
VINYL CHLORIDE								
FDTL-IW15S	S	14	14	1.94	-40	98.5%	No	D
FDTL-IW14I	S	11	0	0.00	0	46.9%	Yes	S
FDTL-IW13I	S	12	0	0.00	0	47.3%	Yes	S
FDTL-IW17I	S	8	0	0.00	0	45.2%	Yes	S
FDTL-IW19I	T	10	10	0.61	16	90.7%	No	PI
FDTL-IW9I	T	14	2	2.09	1	50.0%	No	NT
FDTL-IW7I	T	14	4	2.11	14	75.8%	No	NT
FDTL-IW8I	T	7	5	1.88	-6	76.4%	No	NT

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 2/1/2011 to 5/1/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
TRICHLOROETHYLENE (TCE)								
FDTL-IW141	S	6	1	2.12	-5	76.5%	No	NT
FDTL-IW15S	S	7	2	1.74	-9	88.1%	No	NT
FDTL-IW13I	S	7	5	1.10	-20	100.0%	No	D
FDTL-IW19I	T	7	4	1.11	-8	84.5%	No	NT
FDTL-IW17I	T	5	3	1.54	5	82.1%	No	NT
FDTL-IW7I	T	7	7	0.57	-12	94.9%	No	PD
FDTL-IW8I	T	2	2	0.00	0	0.0%	No	N/A
FDTL-IW9I	T	7	7	0.31	-9	88.1%	No	S
VINYL CHLORIDE								
FDTL-IW15S	S	7	7	0.54	9	88.1%	No	NT
FDTL-IW141	S	6	0	0.00	0	42.3%	Yes	S
FDTL-IW13I	S	7	0	0.00	0	43.7%	Yes	S
FDTL-IW19I	T	6	6	0.46	6	81.5%	No	NT
FDTL-IW9I	T	7	1	2.13	6	76.4%	No	NT
FDTL-IW7I	T	6	2	1.54	7	86.4%	No	NT
FDTL-IW8I	T	2	1	0.00	0	0.0%	No	N/A
FDTL-IW17I	T	5	0	0.00	0	40.8%	Yes	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 2/1/2011 to 5/1/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
TRICHLOROETHYLENE (TCE)								
FDTL-IW17I	S	5	3	1.54	5	82.1%	No	NT
FDTL-IW14I	S	6	1	2.12	-5	76.5%	No	NT
FDTL-IW15S	S	7	2	1.74	-9	88.1%	No	NT
FDTL-IW13I	S	7	5	1.10	-20	100.0%	No	D
FDTL-IW19I	T	7	4	1.11	-8	84.5%	No	NT
FDTL-IW7I	T	7	7	0.57	-12	94.9%	No	PD
FDTL-IW8I	T	2	2	0.00	0	0.0%	No	N/A
FDTL-IW9I	T	7	7	0.31	-9	88.1%	No	S
VINYL CHLORIDE								
FDTL-IW15S	S	7	7	0.54	9	88.1%	No	NT
FDTL-IW14I	S	6	0	0.00	0	42.3%	Yes	S
FDTL-IW13I	S	7	0	0.00	0	43.7%	Yes	S
FDTL-IW17I	S	5	0	0.00	0	40.8%	Yes	S
FDTL-IW19I	T	7	7	0.50	10	90.7%	No	PI
FDTL-IW9I	T	7	1	2.13	6	76.4%	No	NT
FDTL-IW7I	T	6	2	1.54	7	86.4%	No	NT
FDTL-IW8I	T	2	1	0.00	0	0.0%	No	N/A

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name: Crystal Towns

Location: Kennedy Space Center

State: Florida

Time Period: 3/1/2012 to 5/1/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
TRICHLOROETHYLENE (TCE)								
FDTL-IW141	S	5	0	0.00	0	40.8%	Yes	S
FDTL-IW15S	S	5	1	2.24	-4	75.8%	No	NT
FDTL-IW13I	S	5	3	1.42	-9	97.5%	No	D
FDTL-IW19I	T	5	2	1.37	-5	82.1%	No	NT
FDTL-IW17I	T	4	2	1.45	5	89.6%	No	NT
FDTL-IW7I	T	5	5	0.47	-1	50.0%	No	S
FDTL-IW8I	T	1	1	0.00	0	0.0%	No	N/A
FDTL-IW9I	T	5	5	0.19	-4	75.8%	No	S
VINYL CHLORIDE								
FDTL-IW15S	S	5	5	0.46	4	75.8%	No	NT
FDTL-IW141	S	5	0	0.00	0	40.8%	Yes	S
FDTL-IW13I	S	5	0	0.00	0	40.8%	Yes	S
FDTL-IW19I	T	5	5	0.16	1	50.0%	No	NT
FDTL-IW9I	T	5	1	1.91	4	75.8%	No	NT
FDTL-IW7I	T	4	2	1.16	3	72.9%	No	NT
FDTL-IW8I	T	1	1	0.00	0	0.0%	No	N/A
FDTL-IW17I	T	4	0	0.00	0	37.5%	Yes	S

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.

MAROS Mann-Kendall Statistics Summary

Project: VAB Area LTM

User Name:

Location: Kennedy Space Center

State: Florida

Time Period: 12/15/1997 to 5/28/2016

Consolidation Period: No Time Consolidation

Consolidation Type: Median

Duplicate Consolidation: Average

ND Values: 1/2 Detection Limit

J Flag Values : Actual Value

Well	Source/ Tail	Number of Samples	Number of Detects	Coefficient of Variation	Mann-Kendall Statistic	Confidence in Trend	All Samples "ND" ?	Concentration Trend
VINYL CHLORIDE								
WCPS-IW1SR	S	15	15	0.79	18	79.6%	No	NT
MLPV-IW9D	S	24	23	2.40	-70	95.6%	No	D
MLPV-IW12I	S	23	20	0.66	-99	99.6%	No	D
MLPV-IW12D	S	25	24	1.07	-178	100.0%	No	D
SATV-IW9I	T	19	15	0.81	-62	98.5%	No	D
PRES-IW7I	T	19	17	1.22	-109	100.0%	No	D
PCCA-MW4	T	13	10	0.63	-23	90.8%	No	PD
PCCA-MW17	T	13	10	0.98	-30	96.2%	No	D
MLPV-MWS3	T	8	7	1.71	10	86.2%	No	NT
MLPV-MWS1	T	8	7	0.72	-22	99.8%	No	D
MLPV-IW9I	T	22	21	1.13	-165	100.0%	No	D
MLPV-IW6IR	T	21	20	1.03	-180	100.0%	No	D
MLPV-IW29D	T	19	19	0.32	-101	100.0%	No	D
MLPV-IW28I	T	19	18	0.59	-108	100.0%	No	D
MLPV-IW18D	T	24	21	1.99	-16	64.4%	No	NT

Note: Increasing (I); Probably Increasing (PI); Stable (S); Probably Decreasing (PD); Decreasing (D); No Trend (NT); Not Applicable (N/A)-
Due to insufficient Data (< 4 sampling events); Source/Tail (S/T)

The Number of Samples and Number of Detects shown above are post-consolidation values.